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COLONY OF MAURITIUS

Annual Report

ON THE

Medical and Health Department

1954

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Introductory

1. The island of Mauritius lies between latitude 19°50 and 20°31 South and longitude 57°18 and 57°48 East of Greenwich. The total length North to South is nearly 39 miles and its breadth East to West is 29 miles. The area of the main island is 716 square miles and that of the small islets round the coast 4 square miles, making a total of 720 square miles (460,800 acres). The ground rises to an elongated central plateau, lying roughly North-South, the altitude of which above sea-level is 1,800—1,900 feet. It is bounded on the North, East and South-West by abrupt and broken mountain ridges. On the South and South-East it slopes gradually to the sea. The highest mountain peak is 2,711 feet.

2. Although Mauritius lies just within the tropics, its climate is on the whole comparatively mild and equable. There are, however, very sensible variations of climate in the different parts of the island. The maximum shade temperature recorded on the Northern plains (180 feet above sea-level) has never exceeded 95°F (35°C) and over the central table-land (1,800 feet) the maximum seldom reaches 80°F (27°C). The high relative humidity renders the heat oppressive at certain times of the year and causes considerable discomfort especially in the lowlands. For the same reason, the winter in the highlands is uncomfortable, though the temperature never falls below 45°F (7°C).

3. Rainfall is abundant, but varies considerably in different parts. The mean annual rainfall varies from less than 30 inches on the north and west coast to 150 inches in parts of the central plateau, where in some years it has been known to exceed 197 inches. The heavy summer rainfall begins in December, reaches a maximum between January and March and gradually decreases to the dry season in October and November. Tropical cyclones are frequent in the vicinity of Mauritius during the summer months (December to April): they have at times caused considerable damage to crops, trees and structures and even, on rare occasions, caused loss of life.

During the year under review, Mauritius was not affected by tropical cyclones although many passed to the north or the south of the island. As a whole, rainfall was 91 per cent of the normal, humidity was slightly below normal, bright sunshine well above normal and temperature about normal.

4. The population lives in the greatest measure on the proceeds of sales of its sugar, record crops of which have been produced during the past few years. The whole economy is dependent on this single crop which constitutes about 97 per cent of the domestic exports in value. The Colony produces comparatively little food: a small quantity of maize, insignificant quantities of rice, some potatoes and other root crops, vegetables and fruits. The bulk of the food is imported.

5. In relation to its resources, Mauritius is overpopulated. The density of population in the towns and in some villages is very large and easily matches some of the most densely populated regions of the globe. The present population is over three times what it was a century ago.

The island has been blessed with prosperity during the past decade and while the remarkable results achieved in the public health field—which this period of prosperity has made possible—have brought the death rates to a low level, there has been a very perceptible increase in the reproductive rates of the population. The birth rate which was around 38 per thousand in 1945 and 1946 rose to 43·8 in 1947, 49·7 in 1950 and 48·1 in 1952. The exorbitant natural growth of the population, over six times what it was in pre-war days constitutes one of the problems of the hour, so much so that the Government has appointed a Population Committee under the chairmanship of the Director of Statistics to investigate and report on the whole problem. In 1953, there was a slight decline in the birth rate which came down to 46·3 per thousand and the downward trend was further conspicuous in 1954 when the rate fell to 41·3.

6. The following figures for the past ten years indicate the improvement in health conditions resulting from the practical eradication of malaria, from a higher standard of environmental hygiene and a better understanding of factors promoting good health, from the continued absence of hurricanes and droughts with resultant high sugar production and comparative prosperity for the whole community:—

Year	*Birth Rate per ⁰/₀₀*	*Death Rate per ⁰/₀₀*	*Infant Mortality Rate per ⁰/₀₀*	*Maternal Mortality Rate per ⁰/₀₀ births*
1945	38·3	36·1	188·0	14.96
1946	38·7	29·5	145·2	10·39
1947	43·8	20·1	113·9	5·25
1948	43·1	23·8	186·2	4·13
1949	46·0	16·6	91·0	3·79
1950	49·7	13·9	76·3	3·51
1951	47·5	14·9	83·5	3·24
1952	48·0	14·8	80·8	3·20
1953	46·3	16·1	93·5	2·71
1954	41·3	16·0	81·1	1·70

The steady improvement in the health of the population is not solely conditional on the elimination of malaria as evidenced by the following figures relating to enteric fever and pulmonary tuberculosis:—

ENTERIC FEVER

Year	*No. of cases notified*	*Rate per ⁰/₀₀ of the population*	*Case mortality per cent*
1948	371	0·839	23·18
1949	316	0·711	16·77
1950	319	0·686	15·98
1951	326	0·670	15·95
1952	252	0·502	7·54
1953	108	0·210	10·18
1954	88	0·160	11·36

PULMONARY TUBERCULOSIS

Year	*Death per 100,000 of the Population*
1948	60·22
1949	65·24
1950	50·78
1951	49
1952	40·08
1953	28·26
1954	23·94

The figures referring to expectation of life must also be stressed: in 1952, 44·8 per cent of males and 52·3 per cent of females born had a chance of survival to 60 as compared to 15·9 per cent and 22·5 per cent respectively in 1944.

It is also of interest to compare the figures relating to expectation of life at birth which are as under:—

Year	*Males* Years	*Females* Years
1944	32·2	33·8
1952	49·8	52·3

7. It has been a feat in recent years to meet the enormous and constantly increasing demand from the public which is reflected in Table I, and more staff is essential to solve many of the difficulties which have faced Medical Headquarters since the end of the war. Recruitment continued to be difficult with the result that at the end of the year, there were 13 medical posts vacant! The shortage of medical staff has a depressing effect on the work of the Department, and means that some of the development projects are at a standstill.

Nurse training has had priority and it is gratifying to note the improvement in the recruitment of probationers. Its effect on the medical service and on the expansion programme cannot be exaggerated, but in order to maintain a high standard of training for the increased number of nursing students and at the same time organize refresher courses which are an essential part of the modern methods of teaching, it is desirable to have more tutors. This requirement is not being lost sight of.

8. Medical planning has a vital bearing on the quality and quantity of the Medical Services. Plans which are intended to expand existing facilities and introduce new ones, to improve the standard of the services and to implement other measures designed to better health conditions are constantly kept under review in the light of changing conditions and with an eye on economy. The Department is fully aware of the urgent necessity of providing additional beds to meet the needs of a rapidly growing population and of extending out-patient departments, the chief function of which is to keep patients out of the costly beds of wards.

9. The health facilities which were available on the island in 1954 are detailed hereunder:—

A. MEDICAL AND HEALTH STAFF

	Government	*Private*
Registered doctors	42	60
Nurses of senior training	5	—
Nurses in hospitals	117	—
Dressers in hospitals	175	—
Superintendent of Midwives	1	—
Midwives	68	—
Sanitary Inspectors	57	—
X-Ray Specialist	1	1
X-Ray Technician	1	—
Pharmacists	1	43
Dentists	3	25

B.I. GOVERNMENT INSTITUTIONS

	No. of Institutions	*No. of beds*
1. General Hospitals	8	1194
2. Dispensaries (including 2 in the Prisons) ...	47	—
3. Specialized Units :—		
(*a*) Maternity and Child Welfare Centres	8	—
(*b*) Leprosarium	1	62
(*c*) Mental Hospital	1	693
(*d*) Orthopaedic Hospital	1	228
(*e*) Prisons Hospitals	2	73
4. Mobile Units :—		
(*a*) Dispensaries	4 units	—
(*b*) Ante-natal clinic...	1 unit	—
(*c*) Dental clinic	1 unit	—

II. PRIVATE INSTITUTIONS

1. Sugar estates hospitals	33	738
2. Sugar estates dispensaries	8	—
3. Nursing homes	5	53

10. The year 1954 was, on the whole, favourable in regard to the incidence of infectious diseases, and an outbreak of measles in the early part was the only epidemic manifestation. No cases of quarantinable diseases have occurred for a considerable time, but it must be remembered that an outbreak of small-pox or cholera is an ever-present danger and our well-organised port and airport health service is a most essential link in the chain of departmental activities.

11. Only 11 cases of poliomyelitis were notified. The last epidemic dates back to 1952.

There are in Mauritius 144 cripples from poliomyelitis contracted prior to 1945.

Since 1945, the figures for cripples and cases are as follows:—

Year of epidemic	*Cases*	*Cripples*	*Per Cent Cripples to Cases*
1945	1,103	482	43
1948-49	578	206	36
1952	328	89	27

The distribution—as far as could be ascertained—between urban and rural areas has been as follows:—

	Rural *per cent*	*Urban* *per cent*
1945	69	31
1948–49	62·5	37·5
1952	60	40

It appears that the disease is now on the decline and that if there is an outbreak in 1955 or 1956, the number of cases is likely to be smaller than in 1952 but by no means negligible, and the number of cripples is estimated at 20—25 per cent of the total cases.

Everyone in Mauritius is concerned to-day with the question of cripples.

The Orthopaedic Division is already well organised ; through its workshop, it is self-supporting in regard to appliances, and the next development is the construction of a 100–bed Rehabilitation and Training Centre by the Sugar Industry Labour Welfare Fund. This Centre will enable the Department to turn into useful citizens a number of cripples and handicapped who would otherwise remain a more or less serious burden on the community.

12. Whooping-cough appears on the island in the epidemic form at intervals of approximately five years. Large numbers of infants and young children become affected at the same time all over the Colony ; and in view of the excellent communications and the compactness of population in both towns and villages, the incidence is about the same in urban as in rural areas. A major explosion occurred during the second half of 1953 and the last cases dragged on into the early weeks of 1954.

The decision was made in 1952 to introduce whooping-cough vaccination as one of the permanent activities of the Health Department and U.N.I.C.E.F. was approached for the initial supply of vaccine. The Fund readily agreed to our request and a substantial amount of vaccine reached us in 1953, though at the height of the epidemic.

Whooping-cough immunization is a relatively long procedure. Taking into account this factor as well as the rapidity of spread of the disease in Mauritius, it was considered that it would serve no useful purpose to begin the vaccination campaign while the epidemic was raging. Further the risk of giving a bad name to the vaccine if we embarked hastily on the campaign was real.

When positive action was started early in 1954, the number of susceptibles was not very high. Yet 6,200 infants and children were vaccinated during the year and the procedure is now permanently established.

13. In the field of Maternity and Child Welfare, the work continues to be performed partly by the Health Department and partly by the Maternity and Child Welfare Society which receives a grant from Government. In order to extend the domiciliary midwifery service in the rural areas, a scheme

has been worked out in cooperation with the Sugar Industry Labour Welfare Fund, which has undertaken to provide adequate accommodation for midwives at the various Social Welfare Centres which are already equipped each with a good clinic. By the end of the year, the construction of 9 midwives' quarters was being completed and it is hoped to staff them in the course of 1955. It should be recorded that, as a result of better provision for mothers, the maternal mortality rate has fallen from an average of 7·69 ‰ for the ten-year period 1941–50 to 1·7 ‰ in 1954.

14. Much progress has been achieved since the School Medical Service was started two and a half years ago. But much more still remains to be done. Some of the major tasks that lie ahead, as for instance the improvement of unsatisfactory environment in some schools, the low state of personal hygiene and the poor nutrition of the school child are all problems closely bound up with the economic condition of the island and of its people. Even if a better school environment could be provided straightaway, thus solving one problem, the task of imparting and spreading the right knowledge about nutrition and personal hygiene is not considered an easy one in a population widely ignorant of elementary matters of nutrition and hygiene. It will have to be a long process. The School Nurses and the Nutrition and Health Assistant have already made a start in this connection, and it is hoped that as the years go by, this aspect of their work will gather momentum. Particular emphasis is laid on this. It will be essential to rely also on the cooperation of the teaching staff.

15. The general health of the sugar estates' labourers and their dependants showed no abnormal variations from the previous years. Inspections are effected at regular intervals by the Sanitary Inspectors and close liaison exists between the Labour Department and the Health Department. Satisfactory medical facilities exist on the estates and on some of them these are indeed of a high order. Progress continues to be made in building and re-building programmes and it is gratifying to note the number of modern and sanitary structures which have been made available in recent years by the employers for the housing of their labour force.

16. Government has taken all the necessary steps for the provision of an adequate service for the treatment of cancer. X-Ray therapy sets have been received, and had it not been for delays in the construction of a suitable building and the installation of the sets, the service would have started functioning during the year. The supply of radium has been increased and 223 milligrammes are now available. There is one full-time qualified radiotherapist on the staff.

17. Mental disease is becoming an outstanding problem for which the increase in population, the stress of modern life and other factors such as alcoholism are largely responsible. The additional accommodation which has been provided since the end of the war to bring the number of beds to nearly 700 is already inadequate and the need for more buildings is felt.

New methods of treatment have been a boon in reducing considerably the period of stay of many patients treated in the hospital, but the time has come when rehabilitation of the mental case must receive increasing attention: this requirement is a most important one in any modern institution.

18.—*(a) Welfare of Deaf and Dumb Children.*—A survey of deaf and dumb children was started in 1952, with a view to their eventual rehabilitation. To that effect, all Medical Officers, nurses, midwives and sanitary inspectors were instructed to report to Headquarters, for purposes of registration, the names and addresses of any afflicted children they may come across, together with any other useful information. The Public Assistance Commissioner and the Maternity and Child Welfare Society have kindly agreed to help in this survey. At the close of the year under review, the names of 55 deaf and dumb children had been registered.

(b) Survey of the Blind.—A Survey of the Blind was started in 1951, in order to ascertain the incidence of blindness in the Colony. So far, the total number of blind persons registered is 56, distributed as follows:—

Age Group (yrs)	*1–4*	*5–14*	*15–24*	*25–44*	*45–64*	*65–74*	*Totals*
Male	—	2	2	11	9	—	24
Female	1	—	3	5	21	2	32
TOTALS ...	1	2	5	16	30	2	56

When the figures shown above are compared with those of other countries, which were published in the Chronicle of the World Health Organization in May 1953, it would seem that the incidence of blindness in Mauritius is one of the lowest in the world, the rate being 10·5 per 100,000 of the population, calculated on the mid-year population which was 530,461.

At the same time as the Survey was started, instructions were issued to Government Medical Officers to be on the look-out for all patients suffering from eye defects, whether or not it is on account of such defects that these patients seek advice. A special register is kept at all hospitals and dispensaries for these patients, who are as soon as possible referred to the Ophthalmologist. They are thus able to get expert treatment in time. The Director of Education, who has kindly agreed to help in this work, has issued instructions to school teachers to refer as early as possible all children suffering from eye defects to the Government Medical Officer of the district.

Not a single case of blindness has been registered in the course of the 2 last years by the Director of Medical Services, who still acts as Registrar of the Blind.

19. Blood transfusion is now a well established therapeutic measure which plays an important part in saving life. The sources of supply in this Colony are rather limited, especially so as many persons have a prejudice against the giving of blood ; yet no one needing a blood transfusion has had to go without it. The blood required for transfusion is, whenever possible, obtained from a relative or friend of the patient, but in about 25 per cent of the cases, donors were supplied by one of the voluntary associations. In this connection, it is a pleasure to express gratitude to the St. John Ambulance

Association whose medical secretary runs the Association's Blood Transfusion Service with great devotion and enthusiasm, the Stretcher Bearers Association whose executive members can always succeed in producing a suitable donor within the hour and the Mauritius Branch of the Red Cross Society which is always in the forefront when the welfare of patients is concerned.

20. In many a field have the voluntary workers extended their help to the Health Department. I wish to express gratitude not only to the three organizations mentioned in the preceding paragraph, but also to the Maternity and Child Welfare Society, the Tuberculosis Society, the Social Welfare Committees and to many other groups functioning under the cover of anonymity. I should like to make a special mention of the " Friends of Moulin à Poudre " who have devoted themselves to the cause of the lepers.

21. The Civil Commissioners have continued to act as a valuable link between the Department and the population in all questions pertaining to rural health, whilst our relations with the Municipality of Port Louis and the Town Councils of Plaines Wilhems district remained harmonious.

The contribution of the Education Department has, as always, been vital ; and the influence of the Press, the Cinema and the Mauritius Broadcasting Service—which readily collaborate in the dissemination of information on health matters for the guidance of the population—has been far from negligible.

The Public Relations Officer has demonstrated her awareness of, and interest in all questions pertaining to health by repeated inquiries on our activities with a view to passing on information to the Press. She has assisted in the visual education of the people by means of a well organized mobile cinema service and by providing cinema shows for the inmates of the Mental Hospital.

The cooperation with the Senior Medical Officer, Military Hospital and the Mauritius Branch of the British Medical Association has been maintained, whilst our relations with the private medical practitioners have been smooth and fruitful. As in the past, the most cordial cooperation existed between all Government Services and this Department.

22. During the year, the Director of Medical Services made a tour of visits in the United Kingdom, Eire and the Scandinavian countries under the auspices of the World Health Organization. He also had the opportunity of spending some time in Geneva to gain an insight into the administration of the Organization.

23. Visitors from overseas included : —

Mr. K. Hocking, Officer i/c Colonial Insecticide Research Unit, Arusha, Tanganyika.

Miss Joan Whittington, Director of Overseas Branches of the British Red Cross Society.

Dr. Le Roux, Lecturer in Helminthology at the London School of Hygiene and Tropical Medecine.

Dr. E. J. Hamlin, D.Sc., F.R.A. (S.A.).

PART I

Administration

A. FUNCTIONS OF THE DEPARTMENT

24. The functions of the Medical and Health Department are:—

(*a*) to investigate the influence of social, environmental and domestic factors on the incidence of human disease and disability ;

(*b*) to plan and carry out measures for the promotion of health ;

(*c*) to institute and maintain measures for the prevention of disease ;

(*d*) to provide a quarantine service to prevent the introduction of infectious disease by sea or air ;

(*e*) to provide facilities for treatment of disease including mental disease, by maintenance of hospital and dispensary services ;

(*f*) to make provision for the rehabilitation of the disabled ;

(*g*) to control the practice of medicine, dentistry and pharmacy ;

(*h*) to provide facilities for the training of nurses, midwives and sanitary officers ;

(*i*) to advise local authorities regarding their health services and to inspect those services ;

(*j*) to prepare and publish reports and statistical or other information relating to health.

B. STAFF

25. The activities of the Department are co-ordinated by the Director of Medical Services assisted by two Deputy Directors. The Staff is as follows:—

3 Medical Superintendents.

5 Specialists (one post vacant on the 31st December, 1954).

2 Part-time Specialists.

2 Pathologists (one post vacant on the 31st December, 1954).

2 Senior Medical Officers of Health.

2 Medical Officers of Health (posts vacant on the 31st December, 1954).

28 Medical Officers (5 posts vacant on the 31st December, 1954).

1 Woman Medical Officer.

3 Schools' Medical Officers (2 posts vacant on the 31st December, 1954).

4 Part-time Medical Officers i/c Mobile Dispensaries.

4 Temporary Medical Officers (to fill vacant posts).

1 Assistant Orthopoedic Surgeon (vacant on the 31st December, 1954).

1 Assistant Radiologist (vacant on the 31st December, 1954).

1 Assistant Tuberculosis Officer.

1 Assistant Anaesthetist.

4 Dental Surgeons (one post vacant on the 31st December, 1954).

2 Chemists.

1 Entomologist (vacant on the 31st December, 1954).

1 Pharmacist.

1 Rehabilitation Officer.
1 Principal Matron.
4 Matrons.
1 Superintendent of Midwives (post vacant on the 31st December, 1954).
2 Physiotherapists.
1 Assistant Superintendent of Midwives.
1 Assistant Matron.
2 Occupational Therapists (one post vacant on the 31st December, 1954).
15 Laboratory Assistants.
23 Senior Dressers and Nurses.
339 Dressers and Nurses (38 vacancies).
69 Midwives (2 vacancies).
75 Hospital Attendants, Sisters of Mercy, Assistant Nurses, District Visitors, Village Health Workers.
4 Senior Sanitary Inspectors.
1 Port Health Inspector.
1 Officer i/c Harbour Disinfecting Station.
67 Sanitary Inspectors, Assistant Inspectors, Market Inspectors.
1 Steward Quarantine Station.
2 Storekeepers.
36 Clerks and Assistant Clerks, 7 Typist-Stenographers and 6 Secretaries.
1 Registrar of Health Statistics, 1 Compiler.
1,340 Others of minor ranks (which include messengers, drivers, hospital servants, storemen, Office labourers).

In addition the staff of the Malaria Organization, now styled the Insect Borne Diseases Division, is as follows:—

1 Medical Officer of Health (vacant).
1 Entomologist (vacant).
1 Malaria Survey Officer.
1 Field Officer.
1 Surveyor.
1 Senior Malaria Inspector.
3 Inspectors Grade I.
5 Inspectors Grade II.
4 Assistant Field Officers.
1 Senior Laboratory Assistant.
4 Microscopists.
1,055 Others of minor ranks (which include clerk storekeepers, junior storekeeper, assistant storekeeper, Headmen, Moustiquiers, drivers, field workers, labourers, watchmen, etc.).

Departures on overseas leave :

1 Deputy Director.
1 Medical Superintendent.
1 Specialist, Radiology.
1 Assistant Anaesthetist.
1 Assistant Orthopaedic Surgeon (following termination of contract).
4 Medical Officers (including one on termination of contract).
1 Dental Surgeon.
2 Matrons.
1 Pharmacist.
1 Superintendent of Midwives (following termination of contract).
2 Laboratory Assistants (junior).
1 Chief Clerk.
1 First Grade Clerk.
1 Ward Sister.
1 Staff Nurse.
1 Clinical and Clerical Assistant.

Arrival from Overseas Leave :

The Director of Medical Services.
3 Medical Officers.
1 Medical Superintendent.
1 Specialist, Radiology.
The Principal Matron.

The following senior appointments were made:—

1 Specialist, Radiology.
1 Medical Superintendent.
1 Assistant Tuberculosis Officer.
8 Medical Officers.
1 Woman Medical Officer.
1 Matron (post regraded).

C. FINANCIAL

26. The revenue of the Colonial Government for the financial year 1953–54 was Rs 97,778,504 of which Rs 225,160 was received through the Health Department. The total expenditure on Medical Services was Rs 11,676,674.

This represents a sum of Rs 22.25 per head of the estimated population at the 31st December, 1953, (mid-financial year).

The expenditure for health services under the Development and Welfare plan totalled Rs 1,271,710 out of which Rs 101,340 is recoverable from Her Majesty's Government in the United Kingdom and Rs 1,170,370 chargeable locally.

D. Legal

27. The following measures were finalised and became law during the year under review:—

Proclamation No. 4 of 1954, to fix the day of the coming into force of the Quarantine Ordinance 1953 (15th day of March, 1954).

Proclamation No. 5 of 1954, cited as the Dangerous Drugs Ordinance (Application) Proclamation 1954, to extend the application of Part IV of the Dangerous Drugs Ordinance 1950 to the Drug N.—Allylnormorphine.

Proclamation No. 7 of 1954, to fix the day on which the Trades and Industries (Regulation) Ordinance 1951 shall come into operation (1st day of April, 1954).

G.N. No. 43 of 1954, cited as the Quarantine (Fees for Service) Rules 1954 being Rules made by the Quarantine Authority under Section 6 of the Quarantine Ordniance 1953, for setting out the fees payable to the Quarantine Authority in respect of quarantine services.

G.N. 44 of 1954, cited as the Quarantine (Isolation) (Charges) Rules, 1954, being Rules made by the Quarantine Authority under Section 5 of the Quarantine Ordinance 1953, respecting charges payable by persons undergoing isolation at the Quarantine Station.

G.N. No. 45 of 1954, cited as the Quarantine (Aircraft Landing Restriction) Order 1954, being an Order made by the Quarantine Authority under Regulation 34 of the Quarantine Regulations 1953 ordering disinsectisation of aircraft coming from Kenya, Uganda and Tanganyika territories and also from Madagascar and Reunion Islands.

G.N. No. 46 of 1954, cited as the Quarantine (Prescribed Airport) Order 1954, being an Order made by the Quarantine Authority under paragraph (3) of Regulation 27 of the Quarantine Regulations 1953, approving the use of Plaisance Aerodrome as a prescribed airport.

General Notice No. 451 of 1954, under Section 161 of the Public Health Ordinance 1925, to select and appoint a portion of land at Alma in the district of Moka to be the site of and to be used as a cemetery.

General Notice No. 534 of 1954, under Section 161 of the Public Health Ordinance 1925, to select and appoint two portions of land, one at Pamplemousses Village and the other at Belle Vue Maurel Village, to be used as cemeteries.

PART II

Laboratory Services

28. The Central Laboratory and its branches continued to be overwhelmed with routine analysis during the year, as evidenced by the increased number of specimens examined as compared with the previous year.

The Central Laboratory dealt with 65,060 analyses ;
The Civil Hospital Branch dealt with 16,538 analyses ;
The Victoria Hospital Branch dealt with 15,588 analyses.

In the section of haematology, owing to the modern trend in transfusion therapy, blood grouping and cross-matching have absorbed a good part of the time both during and after working hours. This naturally affected the time available for other analyses. The Laboratory has continued to prepare its own Anti A and Anti B sera: at times it is difficult to keep up with the demand.

Another test which has become very popular is the male toad test. The number of tests made increased from 690 in 1953 to 1,185 in 1954. Whatever be the reason, it is an extreme hardship to obtain sufficient male toads to cope with the situation. The male toad population of Réduit and its environs is fast disappearing.

The biochemical section which used to be a part of the chemical division was transferred to the section of clinical pathology. This centralises all sections related to clinical medicine under one control. It makes the keeping of records and interpretation of results easier ; at the same time this system allows junior laboratory assistants to be trained in biochemistry, a subject in which they received no training during previous years. It is felt that in a relatively small laboratory as is available here, everyone should be trained in all routine matters and be able to replace a colleague whenever the occasion arises.

The following new tests were introduced during the year:—

Alkaline and Acid phosphatase in blood.
Antibiotic sensitivity test.

The laboratory continues to perform analyses for the veterinary division of the Department of Agriculture. During the year the grounds were turned into a poultry farm following an outbreak of Newcastle Disease diagnosed here and confirmed by the Pasteur Institute of Madagascar.

29. One post of pathologist is still vacant and there appears to be little likelihood of its being filled in the near future.

Among those who visited the laboratory during the year were H.E. the Governor, and Dr. Le Roux of the London School of Tropical Medicine. The latter spent a fortnight doing research work on the local snails for the purpose of discovering the local vector for *S. haematobium*. He found forked tail cercariae being shed by *B. forskali* collected at Carreau Acacia. These cercariae, he injected into mice which he took back to London with him, but up to the time of writing no confirmation has been received from Dr. Le Roux that the cercariae were in fact those of *S. haematobium*.

30. The work performed at the Laboratory is analysed at Appendix I and the annual report of the Government Chemist is at Appendix II.

PART III

Medical Services

31. Mauritius has a reasonably good network of hospitals and out-patient clinics, through which treatment facilities are afforded to the inhabitants of the island. Unfortunately, there has been little expansion of hospitals within recent years and it is becoming obvious that to meet the needs of the population which has increased by over 110,000 souls during the past ten years there should be an extension of the existing facilities, the introduction of new ones and provision for the appointment of additional staff. The extension of our hospital service is now long overdue.

Owing to the present shortage of beds, it frequently happens that patients have to be refused indoor treatment or to be discharged prematurely. On the other hand, personnel, fully trained and devoted, is probably more important than buildings. Staff is being trained as fast as circumstances permit, but training is a matter of time and the numbers could not be appreciably increased during the period under review, with the result that to accomplish their task, Medical Officers and Nurses—particularly Medical Officers—had often to remain on duty for long hours. The patients owe them a debt for their devotion to duty and for the efficient manner in which their work was performed.

I. HOSPITALS

32. A summary of the distribution of public hospitals and beds is given below:—

Place	*Number of beds*	
Civil Hospital, Port Louis	410	
Victoria Hospital, Quatre Bornes ...	263	
Long Mountain Hospital	65	
Poudre d'Or Hospital	70	
Flacq Hospital	92	
Mahebourg Hospital	105	
Souillac Hospital	91	
Moka Hospital	80	
TOTAL EXCLUDING SPECIAL INSTITUTIONS ...		1,176

Special Institutions:—

Mental Hospital	693	
Leper Settlement	62	
Orthopaedic Centre	223	
TOTAL		978
GRAND TOTAL ...		2,154

33. Table II indicates the work performed at the various hospitals. 31,048 in-patients were treated during the year as compared with 31,909 for 1953, 31,206 for 1952 and 30,747 for 1951. Overcrowding, which carries the risk of creating disease in the hospital itself and is especially noticeable at certain times of the year, is still too frequent ; but a satisfactory hospital service has been maintained notwithstanding inadequate accommodation.

Specialist Services

34. The services of specialists are available in the larger centres of treatment, special posts being now established in the following branches: surgery, orthopaedics, anaesthetics, radiology and tuberculosis. There are also four posts of assistants in orthopaedics, tuberculosis, anaesthetics and radiology. In addition, one ophthalmologist and one genito-urinary surgeon serve in a part-time capacity, but they are both on call for emergencies.

Personnel

35. The staff position in regard to medical officers continued to be disquieting. On the one hand, the Colony has not yet had the full benefit from the supply of Mauritian medical students who commenced their studies in the years following the end of the Second World War ; on the other hand, it has become clear that, by comparison with salary scales offered in many other territories, the rates of remuneration recommended by the 1952 Salaries Commission are not attractive enough to induce doctors to join the Service. Many of the recent Mauritian graduates returning to their native land have elected to undertake private practice which, at least for the time being, offers far better prospects.

As in the immediately preceding years, part of the medical staff went on ordinary or study leave overseas during the year, a most welcome development which called for the creation of a leave reserve. To this, the Government readily agreed, but it had not been possible by the end of the year to fill all the new posts appearing in the Health Estimates. It would seem that sufficient recruitment from local sources to meet the demand may not take place before 1956 and even then, there might remain an undesirable gap between the experienced and the inexperienced, the more so that a few senior medical officers are due for leave prior to retirement in that same year.

During the period under review, the Medical establishment was increased by 8 Medical Officers and one assistant specialist, while one assistant specialist left the Colony on completion of his three-year contract. Two Medical Officers retired. It was also possible to fill the post of Woman Medical Officer which had been vacant for several years. There were 7 medical officers on leave in Europe of whom one was studying for the diploma in radiology, one for the diploma in oto-rhino-laryngology, one for the diploma in anaesthesia and the fellowship of the Faculty of Anaesthetists and one was following a course in ophthalmology.

The nursing establishment could not be kept up to strength despite the fact that 15 nurses, 26 dressers and 6 midwives were appointed. As a result of the expansion of departmental activities, it has been necessary in the recent past to transfer a number of nurses and dressers to specialised divisions such as tuberculosis and the B.C.G. Campaign, the School Medical Service, radiology, the mobile dispensary service and the maternal and infant welfare service. It is true that improvements in the conditions under which the nursing staff work has had a beneficial effect on the recruitment of probationers, but it takes time to prepare a reasonably experienced nurse.

Buildings and Equipment

36. In regard to buildings, the Medical and Health Department continued to compete with other Public Departments. Though production methods adapted to the Colony's background are being improved, building contractors still find it difficult to execute work beyond a certain limit in any one year. Further, the cost of construction remains relatively high.

During the year, work proceeded on the new Nurses' Home which is being erected as an adjunct to Victoria Hospital at Quatre Bornes. The building comes in its time to stress the importance of nursing as a modern career for the youth of Mauritius.

The Orthopaedic Centre, the foundation stone of which was laid in 1953 by His Excellency the Governor, went on taking shape. As much still remained to be done at the close of the year, it is doubtful whether this new unit could begin to function before December, 1955. Meanwhile the orthopaedic cases continue to be treated at the Floreal temporary hospital which has now reached the last stage of decay and is a source of great anxiety when there is a cyclonic disturbance in the neighbourhood of the island.

Repairs and minor extensions proceeded satisfactorily in the district hospitals and it is gratifying to place on record that modern water-borne sanitation is now available in seven out of the eight hospitals and in all three special institutions.

Provision of better equipment has not been overlooked and further improvements have been carried out on the lines indicated in previous annual reports.

Medical Stores

37. The stores section is under the charge of a Chief Storekeeper who is responsible for storing and distributing drugs, dressings, bedding and clothing, surgical instruments and other equipment received from overseas or purchased on the local market. The Pharmacist supervises the placing of orders for drugs and surgical dressings and he is responsible for the Pharmaceutical Laboratory where solutions for injections are prepared. This small pharmaceutical manufacturing unit has brought about a saving on expenditure and it is no longer necessary to pay for the transport of appreciable quantities of water between Europe and Mauritius.

Radiology

38.—*(a)* The year under review witnessed a continuous rise in the number of patients referred either for X–Ray examination or for treatment. The number of cases for X–Ray examination dealt with at Victoria Hospital and at Civil Hospital totalled respectively 17,008 and 2,790—a grand total of 19,798, a staggering figure. Details of the classification of the cases seen at Victoria Hospital are given in Table III ; those seen at Civil Hospital were cases of bone injuries in the main.

The 223 mgm of radium we dispose of have been in almost continuous use, 72 patients being treated thereby. Most of the radium cases were cases of carcinoma of the uterus, only 5 cases of carcinoma of the oral cavity being seen during the year, and eleven cases of malignancies of the skin, e.g. rodent ulcers and squamous cell carcinoma.

On two occasions the Department ordered radioactive phosphorus for the treatment of polycythaemia vera, with gratifying results. With increasing air transport facilities, we may confidently look forward to an expanding future in the field of radioactive isotopes.

To sum up—1954 was a year of great activity that strained our limited staff and equipment to the utmost.

(b) The work performed in the Division of Radiology is detailed below:—

Total number of patients: 16,554.

1954	*Skeleton*	*Aliment-ary tract*	*Chest*	*Urinary tract*	*Abdo-men*
January	536	206	392	53	25
February	542	236	636	38	22
March	586	285	691	43	35
April	532	234	511	51	27
May	567	235	516	33	36
June	566	229	521	48	26
July	552	279	562	23	37
August	567	238	526	20	34
September	555	218	519	47	41
October	642	224	644	34	48
November	523	229	594	19	27
December	585	185	522	28	28
TOTAL	6,753	2,798	6,634	437	386

Total seen at Victoria Hospital	17,008
,, Civil Hospital	2,790
Infra Red Treatment	359
Ultra Violet Treatment	128
Radium applications	72

OPHTHALMOLOGY

39. The following work has been done by the Ophthalmologist:—

I. VICTORIA HOSPITAL

Diseases	*In-patient*			*Out-patient*					
	M	*F*	*Total*	*Cases M*	*Attend-ances M*	*Cases F*	*Attend-ances F*	*Total cases*	*Total Attend-ances*
Cataract	116	128	244	220	305	402	463	622	768
Glaucoma	—	—	—	20	48	21	41	41	89
Conjunctivitis	2	1	3	90	100	114	140	204	240
Blepharitis	—	—	—	17	18	21	23	38	41
Hordeolum	—	—	—	34	37	67	79	101	116
Iritis	2	1	3	53	78	32	56	85	134
Keratitis	—	2	2	67	100	68	89	135	189
Uveal tract	2	—	2	4	4	13	16	17	20
Optic nerve and retina	—	—	—	55	85	30	47	85	132
Lachrymal sac and duct	4	8	12	31	35	95	120	126	155
Inflammatory disease	2	—	2	12	15	34	43	46	58
Refractive errors	—	—	—	111	123	171	193	282	316
Corneal ulcer	2	5	7	133	153	31	31	164	184
Corneal opacities	5	1	6	30	34	11	16	41	50
Pterygium	—	—	—	30	34	48	56	78	90
Strabismus	2	4	6	16	20	26	35	42	55
Foreign bodies injuries	19	4	33	100	102	15	15	115	17
Burns	—	—	—	2	2	—	—	2	2
Other diseases	18	5	33	269	313	242	288	511	601

The operations performed were:—

Cataract	190	Entropion	3
Glaucoma	6	Enucleation and evisceration ...	117
Conjunctival flap	11	Tumour of lid	7
Iridectomy	18	Tarsorrhaphy	1
Pterygium	16	Plastic op. of fornix	1
Chalazion	45	Keratotomy	2
Squint	6	Cauterization	1
Dacryocystectomy	8	Dilatation of duct	16
After cataract	12	I. O. F. B.	1
Injury to duct	6	Infiltration	2

II. CIVIL HOSPITAL

Diseases	*In-patient*			*Out-patient*					
	M	*F*	*Total*	*Cases M*	*Attendances M*	*Cases F*	*Attendances F*	*Total cases*	*Total Attendances*
Cataract	13	75	88	44	45	177	193	221	238
Glaucoma	2	1	3	3	3	13	20	16	33
Conjunctivitis	—	—	—	18	20	57	58	75	78
Blepharitis...	—	—	—	3	3	6	7	9	10
Hordeolum	—	—	—	6	6	27	28	33	34
Iritis	—	—	—	12	15	13	13	25	28
Keratitis	—	—	—	7	7	8	11	15	18
Uveal tract...	—	—	—	2	4	1	1	3	5
Optic nerve and retina ...	—	—	—	3	4	13	13	16	17
Lachrymal sac and duct ...	—	—	—	10	11	36	38	46	49
Inflammatory disease ...	7	7	14	8	9	8	8	16	17
Refractive errors	—	—	—	39	41	45	47	84	88
Corneal ulcer	—	—	—	15	16	10	10	25	26
Corneal opacities	—	—	—	7	8	7	7	14	15
Pterygium	—	—	—	8	8	11	11	19	19
Strabismus	—	—	—	1	1	6	7	7	8
Foreign bodies	—	—	—	8	8	—	—	8	8
Burns	—	—	—	—	—	—	—	—	—
Other diseases	4	9	13	60	64	195	201	255	265
									956

The operations performed were:—

	M	*F*	*Total*
Cataracts	13	75	88
Glaucoma	1	1	2

Anaesthesia

40. The number of operations has been increasing and this trend is likely to continue, because the population shows more and more confidence in surgery. No one will think of challenging the essential part played by the surgeon and his improved techniques in attracting so many to him, but credit should also be given to the modern anaesthetist who has the means of caring so well for the patient while the surgeon is at work on an organ. The advantages of the trained anaesthetist fully familiar with up-to-date methods cannot be overestimated: highly specialised surgery is made possible, routine major surgery is facilitated and post-operative complications are reduced.

41. The Anaesthesia Branch had two full-time medical officers who, in view of the volume of work, could not between themselves administer anaesthetics in all the cases demanding attention from that special branch. They were assisted by the Medical Officers stationed at the main centres of surgery who gave a number of anaesthetics, mostly in cases of emergency that did not present special anaesthetic problems.

Figures which are given only for major operations are as follows:—

Civil Hospital	2,840
Victoria Hospital	1,083
Floreal Hospital	517
Moka Hospital	241
TOTAL	4,681

Surgery

42. Again it must be recorded that the units covered a very large volume of surgery which overtaxed the resources and time of the surgical personnel available. If many of the operations performed are of intermediate or minor character, this does not mean that they should not be taken into account in assessing the work done since minor and intermediate surgery engage quite considerably the time and energies of the staff. On the other hand, the major cases have demanded more effort in the operating theatres and have made very heavy calls upon the doctors and nurses in the wards for their care during the post-operative phase. A fairly large number of patients come to hospital as emergencies or with disease in an advanced stage and the surgeons have to accept increased operative risk with the hope of saving some of these lives.

It must be stated that the results have been reasonably successful as evidenced by a comparison of the records over a number of years which show a steady increase in the number of operations performed and an equally steady decrease in post-operative mortality. There is no doubt that better surgical techniques, the use of antibiotics in all serious cases, the help given by the trained anaesthetist, attention to electrolytic fluid balance have played a part in these successes; but one cannot help feeling that increase in efficiency in pre-and post-operative treatment is also in a large measure due to the personnel—a fact which deserves special mention.

43. Table IV gives details of surgical operation performed during 1954.

The Orthopaedic Unit

44. During the year the contract of the Assistant Orthopaedic Surgeon and of the Matron came to an en and they both left the Colony: the former in September, the latter in December. One of the two Occupational Therapists resigned in August on marriage. The difficulty experienced in obtaining the services of specialist medical and nursing staff has already been stressed and it should be indicated that one post of physiotherapist has been vacant since 1949. The experiment of sending Mauritian girls for specialised training in the United Kingdom has on the whole not been very satisfactory, as many of them have failed to return and it is considered reasonable to undertake locally the training of certain groups of medical auxiliaries required for the Orthopaedic Unit.

45. The programme which had been planned to facilitate the training and certification of probationers performing duties at the Unit has developed quite successfully. The probationers can now prepare their preliminary examination at the Unit, but they cannot sit for the final examination until they have gone through the Victoria Hospital Training School. The Unit also trains for the Orthopaedic Nursing Certificate. It gives great pleasure and satisfaction to record that during 1954 one probationer passed her preliminary examination, two obtained the final nursing certificate and twenty-five nurses qualified for the Orthopaedic Nursing Certificate.

46. The following figures demonstrate that the Unit continues to be very busy, in spite of the fact that for the last three months of the year only one Orthopaedic Surgeon was available, and during that time the clinic held at the Civil Hospital, Port Louis, had to be stopped:—

(a) Attendances of patients at consultations:—

Attendances	2,456	
Re-attendances	6,351	
		8,807
Poliomyelitis cases	771	
Orthopaedic cases	8,036	
		8,807

Distribution of attendances at:—

Floreal Hospital	4,521	
Victoria Hospital	2,888	
Civil Hospital	958	
Districts' clinics	440	
		8,807

(b) Operations:—

	Major	*Minor*	*Total*
Victoria Hospital	215	47	262
Civil Hospital	40	—	40
Floreal Hospital	517	3,637	4,154
TOTAL	772	3,684	4,456

(c) Attendances for physiotherapy:—

Floreal Hosptal	In patients	17,217
	Out patients	21,112
Victoria Hospital		4,966
TOTAL		43,295

(d) Patients wearing instruments under supervision: 1,036.

The Mental Hospital

47. From the records at our disposal, it would appear that the Mental Hospital originated as far back as 1853. De Froberville writes in his book "La Grande Rivière de Port Louis" that the Civil Hospital which was located at Grand River was transferred close to the harbour in 1851 and that about thirty mental patients were left behind in the vacated quarters. In 1853 the buidling was converted into an asylum for lunatics and called the Lunatic Asylum, but it was not until 1858 that the first Ordinance (No 37 of 1858) giving legal existence to the institution was enacted. Dr. Lewis Powell was appointed to take charge of the new institution.

The building was a double storey one and it transpires from de Froberville's book that prior to 1853 mental patients were treated at the Civil Hospital, Grand River, where some cells in the lower storey were reserved for them. The writer further points out that once the hospital had become a lunatic asylum it had the aspect of a large empty tomb on account of the bright light which entered the building through its numerous windows.

The index book still available at the Mental Hospital indicates that the first mental patient was officially admitted in 1814 and there is evidence to the effect that in 1858 there were 118 patients at the Grand River Lunatic Asylum. On the 6th December 1879 the patients, numbering 218, were transferred to Beau Bassin where the accommodation consisted of four wards, one private block, one day room and one set of cells on the male side and two wards, one infirmary, one day room, one private block and one set of cells on the female side. In March 1881, thirty imbeciles were transferred to the Barkly Lunatic Branch ward to relieve the congestion in the overcrowded hospital, and the then Superintendent, Dr. Davidson, drew the attention of the Chief Medical Officer to the necessity of having aditional accommodation provided as the patients at that time numbered 300 for a maximum capacity of 260 beds. By the end of 1883, two male and one female wards had been added to provide the requisite space.

Up to 1924 when Dr. J. D. Dyson, M.B.E., took over, the treatment of mental patients did not go beyond keeping them out of harm's way. Dr. Dyson set before himself a complete reorganisation of the hospital and the introduction of methods of treatment which had not been used until then. He recommended that a Matron with special qualifications in mental nursing be appointed to look after the female section of the hospital. He pointed out—and quite rightly—that the word lunatic " was an anachronism and conveyed a somewhat derogatory meaning to the average layman " with the result that the Lunatic Asylum became the Mental Hospital.

The hospital has since been considerably enlarged to accommodate the ever-increasing number of patients and the latest additions were completed in 1954. It extends over an area of about 30 acres for a population of about 700 patients.

Since 1946 considerable progress has been made. All the modern methods of treatment: psychotherapy, insulin shock therapy, electroplexy, occupational therapy and deep narcosis therapy have been introduced. It is hoped that electro-encephalography will become available early in 1956 and consideration is being given to the setting up of a child guidance clinic at the earliest possible opportunity.

In 1880 when the hospital had 300 inmates, the staff was as follows: —

1 Medical Superintendent ;
1 Assistant Superintendent (not a medical man) ;
1 Steward and Head Attendant ;
1 Gatekeeper ;
9 Male warders ;
7 Sisters of mercy (replaced in 1881 by lay personnel) ;
24 Male and 6 female servants.

In 1954, for nearly 700 patients, the staff was:—

1 Medical Superintendent ;
2 Medical Officers ;
1 Matron ;
1 Head Attendant ;
1 Assistant Matron ;
1 Assistant Head Attendant ;
1 Steward and Clerk ;
1 Storekeeper ;
12 Qualified female Nurses ;
13 Qualified male Nurses ;
17 Female Attendants ;
10 Male Attendants ;
3 Gatekeepers ;
2 Seamstress ;
116 male and 95 female servants.

48. *Administration.*—Dr. R. Comty, the Medical Superintendent, returned from overseas leave on the 20th June, 1954, but had to retire on the 31st August for health reasons. The Colony owes a debt to Dr. Comty who has had the merit of introducing many important reforms in the field of treatment and for the application of welfare measures which have gone a long way towards improving the lot of the mental patient. He was succeeded by Dr. J. E. Brunel who has been associated with the hospital for many years. Dr. A. Vellin proceeded on overseas leave on the 9th July and was replaced by Dr. M. Remy. Dr. A. Raman joined the staff on the 28th December.

49. *Insane population of the Colony.*—The following table gives the number of insanes in the Colony:—

	General Population			*Indo-Mauritian Population*			*Chinese*			*Total*
	M	*F*	*T*	*M*	*F*	*T*	*M*	*F*	*T*	
At Mental Hospital	165	133	298	164	101	265	17	9	26	589
On probation leave	110	103	213	162	116	278	12	2	14	505
On leave under G.N. 239/24...	24	13	37	9	8	17	—	—	—	54
TOTAL ...	299	249	548	335	225	560	29	11	40	1,148

The percentage of sex distribution was as follows: males 57·75 and females 42·25 compared with males 55·91 per cent and females 44·09 per cent for the year ending 31st December, 1953. The rate of insanity per 10,000 population for Mauritius and dependencies was 21·085 for an estimated population of 544,459 on 30th June, 1954, the rate per 10,000 among the general population (including Chinese) was 31·322 ; the rate per 10,000 among the Indo-Mauritian population was 15.677.

It is not possible to give a separate rate in respect of the urban and rural areas.

50. *Hospital population.*—The number of patients at the Mental Hospital on the 31st December, 1954, was 627 (males 369, females 258). Of these, 38 (23 men and 15 women) were still under observation awaiting examination by the District Commissioners in Lunacy.

The following table gives the number of admissions, discharges and deaths:—

	M	*F*	*Total*	*M*	*F*	*Total*
Remaining in hospital on 1st January, 1954 ...	—	—	—	389	287	676
Cases admitted during the year						
Back from New Year's leave (G. N. 239/24) ...	33	26	59			
1st Admissions	224	122	346			
Other admissions	102	37	139			
Re-admitted from probation leave	111	79	190			
Admitted but died before examination by Commissioners in Lunacy	6	4	10	499	284	783
Admitted but died at Victoria Hospital before examination by Commissioners in Lunacy ...	—	1	1			
Still awaiting examination by Commissioners in Lunacy	23	15	38			
	499	284	783			
TOTAL NUMBER OF CASES UNDER CARE	—	—	—	—	—	1,459
Discharges and Deaths						
Recovered and released	230	81	311			
Discharged by Commissioners In Lunacy, (found sane)	12	4	16			
Transferred to Poor Law House	27	22	49			
Discharged by Central Board of Commissioners in Lunacy	196	160	356	519	313	832
Died whilst on leave under G.N. 239/24	3	3	6			
Died during the year	18	21	39			
Transferred to Victoria Hospital and died there ...	—	1	1			
On leave under G. N. 239/24 on 31st December, 1954	33	21	54			
Remaining in hospital on 31st December, 1954 ..	—	—	—	—	—	627

During 1954, 88 patients on trial (35 males and 53 females) were found cured and finally discharged by the Central Board of Commissioners in Lunacy.

The daily average number of patients was 678 compared with 680 for the previous year. The maximum daily number of patients was 731 compared with 730 in 1953.

The proportion of the number of patients discharged to the number of admissions was 92·9 per cent but 41 per cent of the patients discharged during the last 2 years relapsed and had to be re-admitted.

The ratio of admissions for the year per 10,000 population was: general population 11·8 and Indo-Mauritians 8·3.

The ratio of admissions per 10,000 population in urban and rural areas was as follows:—

	General Population	*Indo-Mauritians*
Town of Beau-Bassin Rose-Hill	19·7	21·2
Town of Port Louis	19·6	16·1
Town of Curepipe	15·2	13·2
Town of Quate Bornes	7·4	8·8
Rural Areas	9·1	6·7

51. *Average stay of patients*:—

(a) for patients discharged in less than one year, the average stay was 120 days ;

(b) for patients discharged in less than five years, the average stay was 2 years 5½ months ;

(c) those whose stay is more than 5 years may be considered as chronics.

52. *Deaths*.—The number of deaths registered during the year was 39, as compared with 33 in 1953 and 37 in 1952. Of these 11 died in the first few days following their admission owing to their poor physical condition. The death rate was 2·67 per cent for a total of 1,459 patients under care against 2·41 for 1,316 patients in 1953. The apparent drop in the death rate when compared with the figures published for 1953 is due to the fact that that rate was calculated on the average daily number of patients and not on the whole population at risk.

53. *Causes of insanity*.—Alcoholism is still the major etiological factor, 113 men and one woman were found to be suffering from alcohol psychosis. Malnutrition, especially among women, comes next. The other factors were heredity, domestic worry, epilepsy.

The factors relating to alcoholic psychosis in Mauritius belong to two categories: psychological, social.

The first group comprises:—

(a) mental deficiency ;

(b) neurosis ;

(c) psychoses, problems for the psychiatrist ; and

(d) psychopathic personalities which are a challenge to society and do not respond to treatment.

The second group which is a problem to the psychiatrist as well as to the social worker, consists mostly of habit-alcoholics. The lack of social life induces these individuals to drink. They find no interest in their home and in order to "kill time," they congregate in liquor shops and take to alcohol. This class includes many dockers, labourers and manual workers. It appears that dockers drink daily between 5 and 7 p.m. An enquiry has revealed that they are so tired in the afternoon after their strenuous work is over that to "get going" they resort to alcohol which, in their opinion, acts as a stimulant, and affords immediate relief. This conception is a fallacy as alcohol is not a stimulant, but merely a sedative. The false fatigue-relief is due to the inhibitive action of alcohol on the nerves' tracts to and from the brain. The other categories of manual workers, as a rule, drink during week-ends. They are liable to become daily drinkers, for sooner or later a craving for alcohol is set up.

The majority of alcoholic psychoses in Mauritius is caused by habit-alcoholism and the treatment of that class of drinkers is more preventive than curative.

54. *Infective, nutritional and allied diseases.*—There were 43 cases of dysentery. One fatal case of typhoid fever was registered. 81 cases of pellagra were noted, of which 30 in newly admitted patients. These cleared up very rapidly under adequate treatment and proper dieting. Also 3 cases of ariboflavinosis were seen. All the inmates are inoculated against typhoid fever as a routine measure.

55. *Violence and escape.*

Minor injuries were as follows:—

Self-inflicted injuries: 38.

Injuries by patients to other patients: 28.

Injuries by patients to dressers and servants: 5.

No case of escape was registered during the year.

56. *Physical methods of treatment*—Insulin shock therapy and electroplexy still are the principal modes of treatment. The successful results reported in the previous yearly reports are still being obtained. The results of the treatment by acetylcholine have not come up to expectations and it has now been abandoned for other forms of treatment. Experiments are being made with Rauwolfia serpentina. According to medical reports from America this new form of treatment has given excellent results in the excited phases in schizophrenia and chronic mania. The outpatients' department is becoming increasingly popular and the number of persons attending for treatment and advice becomes greater every year. Were it not for the opening of this outdoor department, all the patients treated there would have had to be admitted into hospital which is already overcrowded, or else they would have remained untreated.

57. *Welfare of discharged patients.*—There is unfortunately as yet no organization to take care of patients discharged from the Mental Hospital. The duty of Society towards mental patients does not end at the very moment they are discharged from the hospital, apparently cured. They must be looked after and have all the assistance they need, and to prevent possible relapses, understanding and sympathy are as essential to them as the bare necessities of life. This problem is retaining attention and it is hoped that in the not too distant future, some sort of organisation will be set up to look after former patients who have returned to normal life.

58. *Recreation and occupational therapy.*—The weekly outings to the seaside are warmly appreciated by patients. Cinema performances, given once monthly at the nearest picture-house, are immensely popular with the patients who enjoy not only the performance itself but also a stroll in the town. The Public Relations Officer also provided seven cinema performances

in the hall of the hospital. Cards, pong-pong, volley-ball, drafts are favourite games. Radio programmes, especially the local programmes, are broadcast to the whole institution through loud-speakers. A distribution of cakes and lemonade was made on Christmas day and each patient received a special present on that occasion.

A daily average of 96 women are kept busy doing sewing, embroidery, cleaning and upkeep of wards, gardening and washing. On the other side, forty patients work in the kitchen garden which supply part of the vegetables needed for the hospital. Seventy men do other odd jobs such as carpentry, cabinet making, tin and cane-work, upkeep of wards and they also attend to the flower gardens.

Regular working patients are paid a small allowance which they can spend as they choose.

59. Cost of maintenance:—

Items for the year 1954:—

	Rs. c.
Salaries and wages	548,288.11
Fees for district Commissioners in Lunacy	8,010.00
Fees for members of Central Board	240.00
Provisions, fuel, lighting	318,464.74
Clothing, bedding	52,092.05
Uniforms	22,984.12
Drugs, dressings, surgical instruments	21,522.02
Implements, stores, sundries	12,312.37
TOTAL ...	983,913.41

The daily average cost per patient was Rs 3.68 against Rs 3.62 in 1953. The average cost of stay of patients discharged in less than one year was Rs 441.60 per patient.

The cost of stay of patients discharged in less than 5 years was Rs 3,293.60 per patient.

60. *Religious Services.*—Mass is said once every month in the Roman Catholic chapel of the hospital. Seven services were held by the Minister of the Church of England.

61. *Visits*—His Excellency the Governor, Sir Robert Scott, K.C.M.G., and the Liaison Officer for Health, the Honourable R. Seeneevassen, visited the hospital on the 18th August, 1954. The Bishop of Mauritius visited the hospital twice. Lady Scott graciously attended the distribution of cakes and lemonade and presented awards to some patients on Christmas eve. Miss Joan Whittington of the British Red Cross paid a visit to the hospital on the 29th March. Members of the Red Cross (Beau Bassin branch) were regular visitors and distributed sweets and cigarettes to the patients. I take this opportunity to express to them our gratitude and that of the inmates for their kindness and generosity.

DENTAL WORK

62. The general character of the dental treatment scheme has remained the same as during the previous years. The scheme is confined to pre-school and school children, expectant and nursing mothers, selected hospital cases and, when time is available, to members of the Police Force. Up to June 1954, there were three posts of dentists appearing on the Health Establishment: two in charge of the static dental clinics at Victoria and Civil hospitals, one in charge of a mobile dental unit. Provision was made in the Estimates 1954–55 for a fourth dentist and for the acquisition of another fully-equipped mobile unit, the intention being to have one mobile unit covering the northern districts of the island and the second one, the southern districts. The second unit ordered soon after the approval of the Estimates had not been received by the end of the year, and in the absence of adequate equipment, the fourth post of dentist could not be filled.

63. The following is a summary of the work performed:—

(a) Victoria Hospital Clinic:—

Attendances	2,257
Temporary fillings	275
Permanent fillings	805
Deciduous teeth extracted	478
Permanent teeth extracted	30
Gum treatment	60
Fractures treated	3

75 fillings and 54 extractions were done on 126 boys of the Barkly Industrial School who attended the clinic for examination.

Out of the total number of school children examined, 112 only had a healthy dentition and did not require any form of treatment.

(b) Civil Hospital Clinic.

In the course of 134 sessions held by the Government Dentist from January to April 1954, treatment was given to 2,833 patients as under:—

School children	2,502
Expectant and nursing mothers	249
Hospital cases :—	
In patients	9
Out-patients	73
TOTAL	2,833

The nature of dental treatment was:—

Permanent teeth filled	1,387
Permanent teeth extracted	182
Deciduous teeth extracted	936
Surgical operations on jaws	46
Treatment of parodontal disease	278
Osteomyelitis of jaws	3
Fracture of jaws	1

The Dental Surgeon left the Colony at the end of April on overseas leave. During his absence, the work was carried out by a private practitioner who attended to 1,471 patients.

(c) Mobile Clinic.

(*a*) *Schools.*—From the beginning of the school year in mid-January to its close in mid-December, 15 schools were visited. They were: Grand Bay Government School, Mare d'Albert Government School, Grand Sable Government School, Quatre Cocos Government School, Montagne Blanche R.C. Aided School, L'Avenir Government School, Ripailles Government School, North Triolet Government School, Montagne Blanche C.E. Aided School, Triolet Maheswarnath H.A. School, Baie du Cap R.C. Aided School, Bambous Government School, Case Noyale R.C. Aided School, Chamarel R.C. Aided School and Petite Riviere Government School.

Only pupils of Standard VI and above were given complete dental treatment. 248 children needing 701 fillings were thus treated, while 300 teeth and roots considered unsaveable had to be extracted. 60 pupils had their teeth scaled and polished and five found suffering from pyorrhoea were treated by means of a gingivectomy. Besides the Standard VI pupils, 749 children from other classes were also treated. 749 unsaveable teeth, deciduous and permanent, were extracted and temporary dressings were put in 60 deciduous teeth.

In schools where the standard of oral hygiene was considered low, demonstrations of correct tooth-brushing were given.

(*b*) Floréal Orthopoedic Hospital.

The unit calls at the hospital once a week, on Fridays. 502 extractions and 40 fillings were done.

(*c*) Mental Hospital.

The unit pays fortnightly visits to that institution during the school terms, but goes there every other day during the school holidays. Owing to the lack of cooperation of mental patients, it is impossible to fill any tooth and the only methods of treatment have been scaling in selected cases and extractions (1131). Pyorrhoea is quite common among the inmates.

(*d*) Police Force.

Members of the Police Force are treated at Line Barracks every other Saturday during school terms and two or three days a week during the holidays: 80 members of the Force, requiring 171 extractions, 192 fillings, 20 scalings and 5 gingivectomies, were treated.

Statistics of Morbidity and Mortality

64. The statistics of morbidity and mortality in respect of hospitals and dispensaries are given in Table V. The statistical figures concerning the mobile dispensaries are shown separately in this table, figures for attendances being the only ones given since the introduction of a card system has been found impracticable for the mobile units and there is consequently a considerable amount of uncertainty as regards new cases and re-appearances.

The main causes of morbidity are enumerated in Table VI whilst Table VII gives figures for hospital statistics by groups of diseases corresponding to the 1948 International Classification.

II. OUT-PATIENTS

65. All the hospitals have out-patient clinics. These are supplemented by 36 static dispensaries situated all over the island and by a mobile service. The mobile service, which comprises four units under four part-time medical officers, provides for the needs of 64 villages and hamlets where it would be uneconomical to have permanent buildings. These units made 965 trips and were attended by 118,912 patients.

The total attendances at static dispensaries and at the out-patients' departments attached to the hospitals numbered 402,136. The figures for the four immediately preceding years were 399,899 ; 379,476 ; 362,496 and 303,549.

The construction of a new dispensary in the thickly populated area of Triolet in Rivière du Rempart district was completed during the year. It is an excellent building which has been planned, like the other recent dispensary at Petite Rivière, with the object of bringing about the desired evolution of the former type of dispensary into a small rural health centre in which patients can receive treatment and from which advice on better rural sanitation can be obtained and health education disseminated.

III. TRAINING OF MEDICAL AND HEALTH STAFF

66. Conditions and qualifications required:—

(a) *Doctors.* No one can practise medicine and surgery in Mauritius unless he is the holder of either a qualification which renders him eligible for registration in the United Kingdom or a State degree in medicine delivered by any of the Faculties of France.

(b) *Pharmacists.* Persons authorised to practise as pharmacists in the Colony are those possessing diplomas or certificates entitling them to practise as pharmaceutical chemists or chemists and druggists, or as apothecaries in the United Kingdom, or provided with diplomas as chemists and druggists or pharmacists from foreign Universities or Colleges, and authorised by the Governor on the recommendation of the Director of the Health Department, to act as pharmacists in the Colony ; or persons who obtain a Colonial diploma of pharmacist under the provisions of the Pharmacy Ordinance 1912.

(c) *Dentists.* The conditions governing the practice of dentistry are identical to those applicable to doctors. The majority of the dentists have qualified in the United Kingdom.

(d) Nurses and Midwives must be registered at the Medical and Health Department before being allowed to practise. Only those trained in Great Britain and in Mauritius are eligible for registration.

(e) Sanitary Inspectors are employed by the Department and the Local Authorities. Only those trained in Great Britain and in Mauritius are employed.

67. Institutions for the training of Medical and Health Staff:—

(a) There are no facilities available locally for training doctors and dentists.

(b) Persons wishing to obtain the local diploma of phamacist study under private tuition and have to pass an examination, the subjects of which are fixed by regulations framed under the Pharmacy Ordinance 1912. The prospective candidate must, however, fulfil the following conditions: he must have been registered as a student and served as apprentice for a full period of four years to one or more pharmacists before he is allowed to sit for the examination for assitant pharmacists and, afterwards, for a full period of two years as assistant pharmacist to one or more pharmacists before he is allowed to sit for the final examination which qualifies him to practise as a pharmacist.

(c) The training of the nursing staff has, since 1948, been raised to a standard much higher than that accepted in pre-war days. The course of training which was limited to two years, including midwifery, has been extended to three years for the general nursing certificate with an additional year for the midwifery certificate. The examinations are set on a syllabus which is very similar to the British one and the object of reciprocity with Great Britain is constantly kept in mind. The educational standard of nursing students varies from the local Sixth Standard to the Cambridge School Certificate and in some cases they are given an educational test prior to enlistment. The three training schools are at Victoria, Civil and Floreal Hospitals.

(d) In the case of midwives who are also trained at Civil and Victoria Hospitals, the course of training extends over 18 months, one third of that time being spent on the District Midwifery Service.

(e) After passing their final examination, nurses and midwives are generally employed by the Department, where they acquire additional experience. Sometimes a few resign to go into private practice or to join the staff on sugar estate hospitals.

(f) Sanitary Inspectors are trained during 18 months on a syllabus similar to the one of the Royal Sanitary Institute. The minimum educational qualification required for their enlistment as Sanitary Cadet is the Cambridge School Certificate. After passing their final examination, they are all employed by the Medical and Health Department.

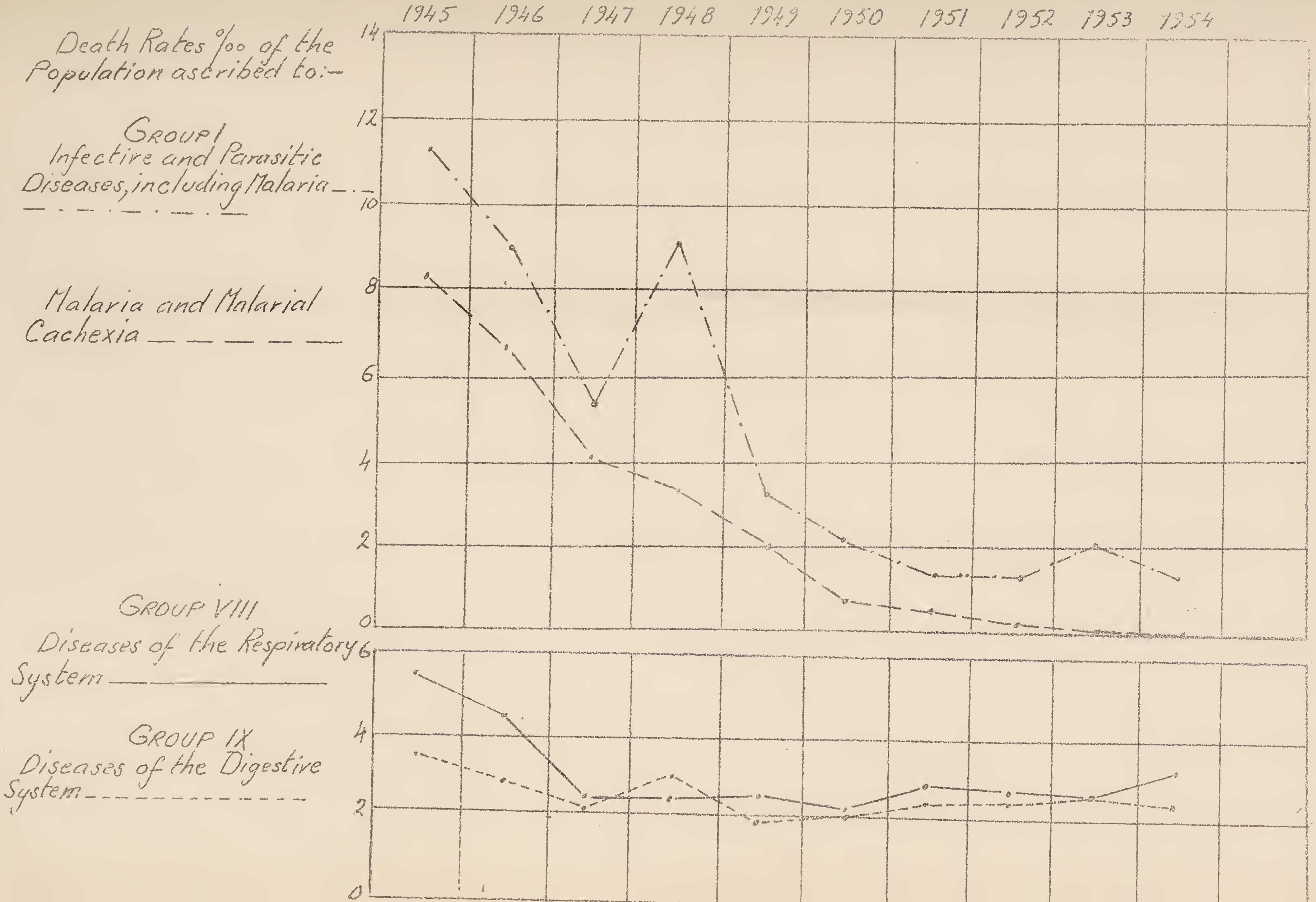
68.—*(a)* There were 106 nursing students and 6 pupil midwives in training on the 1st January, 1954, and the following table indicates the number who successfully completed their training during the past five years:—

	Nurses	*Midwives*	*Dressers*
1950	6	19	4
1951	5	25	14
1952	14	16	8
1953	11	7	16
1954	14	26	6

(b) Two probationers were in the United Kingdom, following a course of training for the S.R.N. and it is proposed that they should subsequently specialize in orthopaedic nursing. One of our radiographers was taking a course at Bristol.

(c) There were five Sanitary Cadets in training. They are due to sit for the Sanitary Inspector's examination in August, 1955.

COLONY DEATH RATES PER 1,000 POPULATION FROM PRINCIPAL CAUSES 1945-1954



PART IV

Health Services

I. VITAL STATISTICS

69. The following table is a summary of vital statistics for the year 1954:—

Area of Mauritius: 720 square miles.

	Males	*Females*	*Total*
Estimated population on the 31st December, 1954	269,834	269,084	538,918
Estimated mid-year population	—	—	530,461
Density per square mile : 736	—	—	—
Marriages : 3,092	—	—	—
Marriage rate per 1,000 population : 11·7 ...	—	—	—
Live births	10,957	10,967	21,926
Live births per 1,000 population : 41·3 ...	—	—	—
Still births : 1,358	—	—	—
Still birth rate per 100 live births : 6·2 ...	—	—	—
Deaths	4,214	4,248	8,462
Crude death rate per 1,000 population : 16·0 ...	—	—	—
Maternal deaths : 40	—	—	—
Maternal mortality rate per 1,000 births (live and still) : 1·71	—	—	—
Infant mortality (under 1 year of age)... ...	946	832	1,778
Infant mortality rate per 1,000 births : 81·1 ...	—	—	—
Deaths from pulmonary tuberculosis	72	55	127
Death rate from pulmonary tuberculosis per 1,000 population : 0·24	—	—	—
Deaths from infective and parasitic diseases ...	335	330	665
Death rate from infective and parasitic diseases per 1,000 population : 1·25	—	—	—
Deaths from respiratory diseases	590	616	1,206
Death rate from respiratory diseases per 1,000 population : 2·27	—	—	—
Deaths from diseases of the digestive system ...	915	832	1,747
Death rate from diseases of the digestive system per 1,000 population : 3·29 ...	—	—	—
Deaths from malaria and malarial cachexia ...	14	13	27
Death rate from malaria and malarial cachexia per 1,000 population : 0·05	—	—	—

70. An analysis of the percentage contribution to the total number of deaths occurring in 1954 made by the more important groups of diseases is shown below together with corresponding figures for the five previous years:—

Group	*Percentage of total number of deaths*					
	1949	*1950*	*1951*	*1952*	*1953*	*1954*
Infective and parasitic diseases ...	21·7	15·1	11·9	9.6	11·8	7·8
Diseases of the blood and blood-forming organs	6,4	5.8	6·7	6.9	6·0	6·6
Diseases of the nervous system and sense organs	4·9	6·0	6·0	6·1	6·1	5·5
Diseases of the circulatory system ; Senility, old age	8·3	9·4	8·9	10·3	11·0	11·0
Diseases of the respiratory system ...	11·2	15·1	14·8	15·5	15·9	14·3
Diseases of the digestive system ...	14·7	14·1	18·5	17·5	15·3	20·6
Diseases peculiar to the first year of life	25·2	27·3	26·6	26·2	26·9	21·0

The graph at Figure I illustrates the fall in the principal death-dealing diseases for the period 1945–1954.

(i) *Population*

71. An excess of 13,464 in the number of births as compared with the number of deaths has caused an increase of population which has been such a marked feature in recent years. The estimated population as at the 31st December, 1954 was 538,918 and the density of population was 736 per square mile for the whole island. The rate of natural increase for the last five years has been 31·17 per thousand as compared with 12·58 per thousand for the 10–year period preceding 1950.

The graph at Figure II shows the trend of population for the 20–year period 1935–54, whilst the graph at Figure III indicates the trend of crude birth and death rates for the same period.

(ii) *Births*

72.—*(a)* The number of live births during the year was 21,926, a decrease of 1,970 on the number for 1953 and an increase of 1,575 over the yearly average number of births for the ten years preceding 1954.

(b) Still births, which are not included as either births or deaths, numbered 1,358, giving a rate of 6·2 per hundred live births. During the year 1953 there were 1,568 still births which gave a rate of 6·6.

(iii) *Deaths*

73.—*(a)* Deaths registered in Mauritius numbered 8,462, corresponding to a rate of 16·0 per 1,000 of the population. The average death rate for the period 1945–54 was 20·18.

Table VIII shows the number of deaths from the principal causes for the ten-year period 1945–54.

(b) The number of deaths ascribed to the puerperal state was 40, giving a rate of 1·71 per thousand births (including still births).

The rates for the previous five years were: —

1949	3·79
1950	3·51
1951	3·24
1952	3·20
1953	2·71

(iv) *Infant and Child Mortality*

74.—*(a)* A most satisfactory reduction in deaths from diseases of infancy has been recorded since 1949. The infantile mortality rate for the year under review was 81·1 per 1,000 live births as compared with 93·5 in 1953, 80·8 in 1952, 83·5 in 1951 and an average of 138·1 per 1,000 over the 10–year period 1941–50.

(b) The deaths under five years of age were distributed as follows, the corresponding figures for 1952 and 1953 for total deaths being shown in brackets: —

Age	*Males*	*Females*	*Totals*	
Under 3 months	541	471	1012	(1,216; 1,346)
3 months and under 6 months	176	140	316	(277 ; 397)
6 months and under 1 year	229	221	450	(455 ; 492)
1 year and under 2 years	374	392	766	(430 ; 575)
2 years and under 3 years	290	343	633	(325 ; 432)
3 years and under 4 years	155	200	355	(139 ; 254)
4 years and under 5 years	92	112	204	(54 ; 124)
TOTAL	1,857	1,879	3,736	(2,896 ; 3,620)

FIGURE II.

TREND OF POPULATION 1935 TO 1954

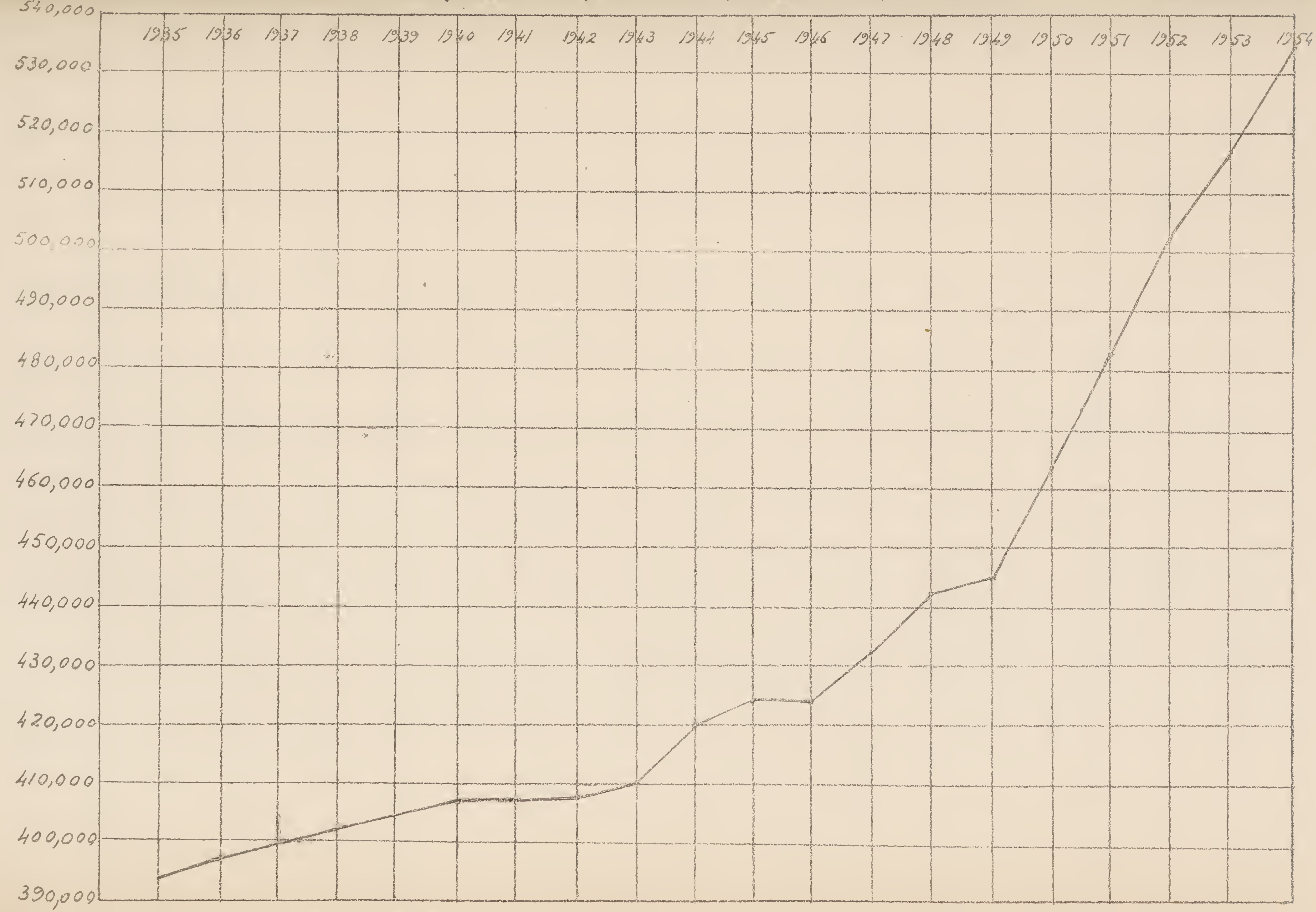
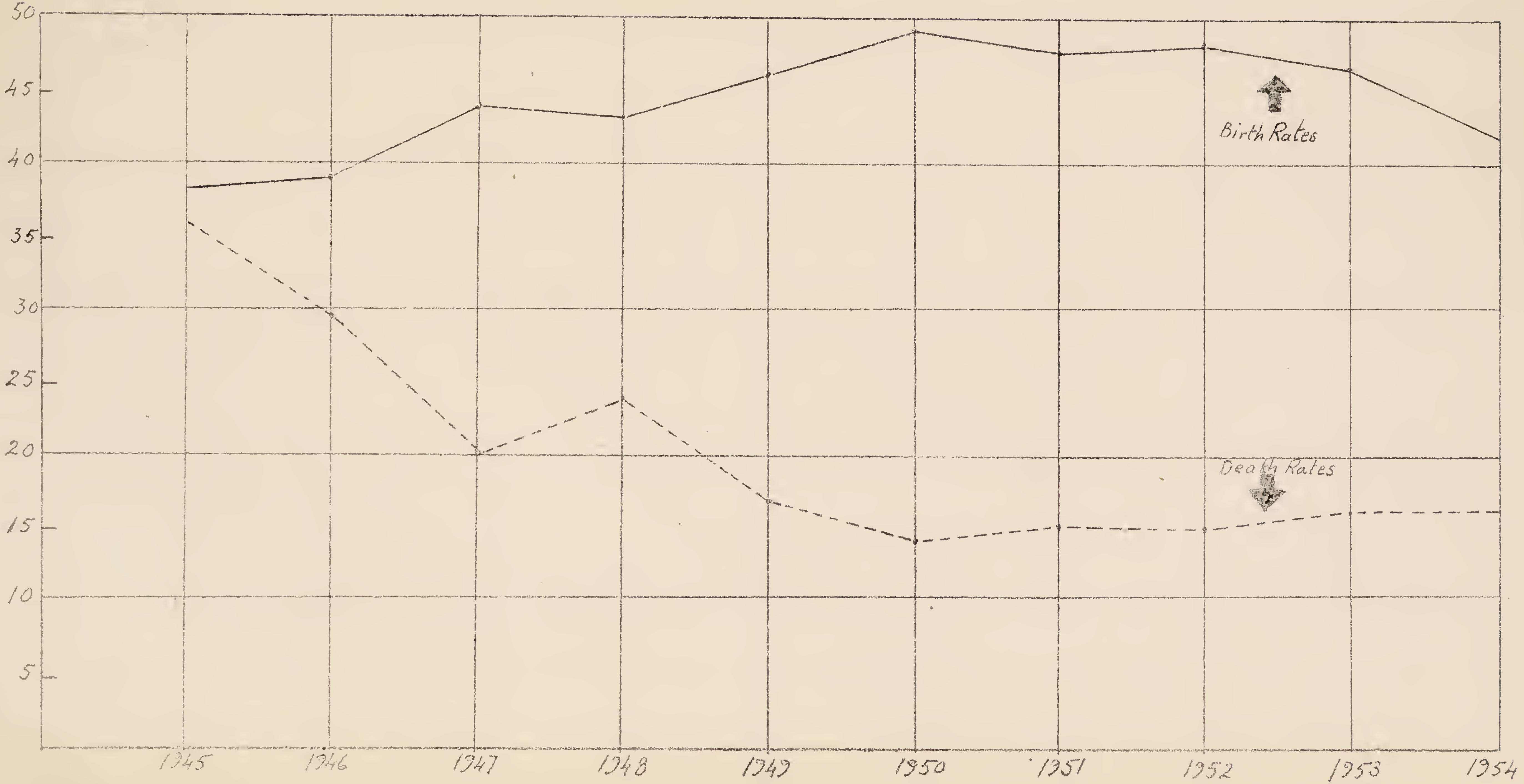
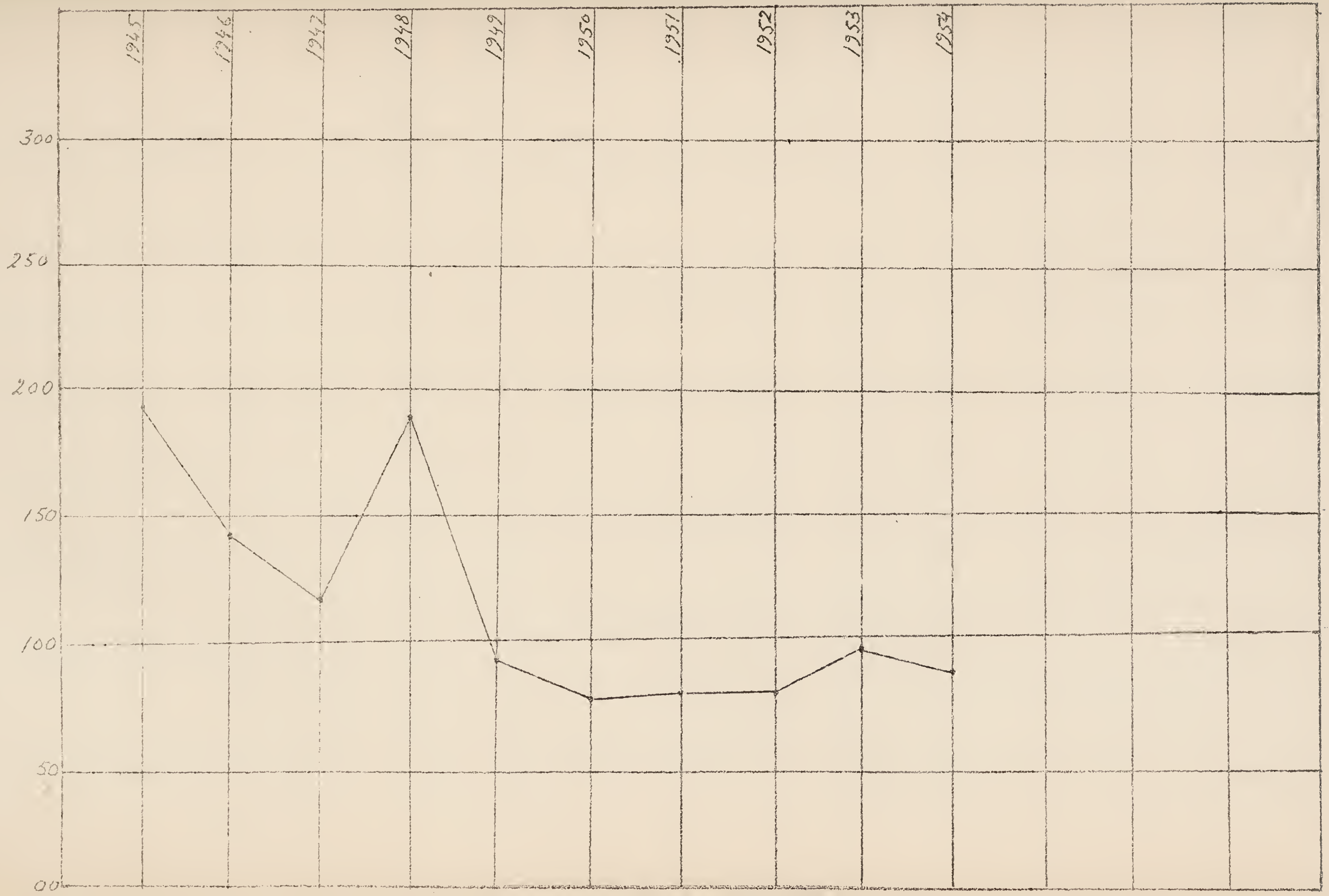


FIGURE III

CRUDE BIRTH AND DEATH RATES — 1945 TO 1954



INFANT MORTALITY RATE — 1945-1954



The figures were affected in 1953 by an epidemic of whooping cough and in 1954 by one of measles.

(c) The principal causes of death in children under five years of age were in the following categories (International List of Causes of Death, 1938 Revision):—

Group	*Under one year*	*One year and under 5 years*
1. Infective and parasitic diseases	139	233
3. Rheumatism, diseases of nutrition etc., ...	19	80
4. Diseases of the blood and blood-forming organs ...	20	105
6. Diseases of the nervous system and sense organs...	35	45
8. Diseases of the respiratory system	227	360
9. Diseases of the digestive system	489	735
15. Diseases peculiar to the first year of life	677	—
17. Death from violence	2	32
18. Ill-defined causes of death	151	336

(d) The mortality rate of children in the age-group 5–14 is a good index of the sanitary conditions of a territory and the figures are given in the following table. In calculating the population for the age group, the percentage distribution of the 1952 census has been used (22·79 per cent) and for purposes of comparison, the crude death rate and the infantile mortality rate are included in the table:—

Year	*Mid-year population*	*Calculated population age-group 5–14*	*Deaths age-group 5–14*	*Death rate age-group 5–14 per 1,000*	*Crude Death rate per 1,000*	*Infant Mortality rate per 1,000*
1948	441,822	100,691	373	3·70	23·8	186·2
1949	444,521	101,306	287	2·83	16·6	91·0
1950	464,735	105,913	213	2·01	13·9	76·3
1951	483,859	110,271	217	1·97	14·9	83·5
1952	501,469	114,284	238	2·08	14·8	80·8
1953	516,525	117,716	275	2·34	16·1	93·5
1954	530,461	120,892	392	3·24	16·0	81·1

(e) The graph at Figure IV indicates the trend of infant mortality rate in Mauritius from 1935 onwards.

75. The following table shows births, still-births, death rates, marriage rates and natural increase of the population and is intended to supply comparative data for the last ten years:—

Year	*Births*		*Still Births*		*Death and Marriage rates 1945–54*			
	Births	*Rate per 1,000 population*	*No. of still births*	*Rate % total births*	*Infant mortality rate*	*Total Death rate*	*Marriage rate per 1,000 population*	*Natural increase of population*
1945	16,290	38·5	1,484	9·1	188·0	36·1	12 0	1,013
1946	16,427	38·7	1,374	8 4	145·2	29·5	18·1	3,899
1947	18,926	43·8	1,277	6·7	113·9	20·1	17·5	10,246
1948	19,039	43·1	1,316	6·9	186·2	23·8	14·7	8,521
1949	20,472	46·0	1,364	6·7	91·0	16·6	16·3	13,088
1950	23,110	49·7	1,410	6·1	76·3	13·9	13·1	16,657
1951	22,968	47·5	1,401	6·1	83·5	14·9	12·7	15,760
1952	24,120	48·0	1,575	6·5	80·8	14·8	16·3	16,673
1953	23,896	46·3	1,568	6·6	93·5	16·1	13·4	15,597
1954	21,926	41·3	1,358	6·2	81·1	16·0	11·7	13,464

II. Public Health

A. COMMUNICABLE AND INFECTIOUS DISEASES

76. *Malaria and anti-malarial measures.*—Malaria has ceased to be a public health problem to the island. *Anopheles funestus*, a vector of considerable importance in Mauritius by virtue of its maintenance of transmission during the winter season has not, in spite of intensive searches, been met since 1951 and it has, to all evidence, been completely eradicated. It is interesting to point out that along with it, *Aedes aegypti* has also disappeared. *Anopheles gambiae*, the other vector, which however does not seem to play a great part in the transmission of malaria under Mauritian conditions, has shown itself resistant to eradication by means of residual spraying and, atlhough not found in houses to any appreciable extent, it is still breeding, particularly on the coast. The eradication scheme initiated in 1949 which has resulted in the complete elimitation of *A. funestus* and *Aedes aegpti*, the reduction of the disease to negligible proportions and has brought the solution to our major public health problem, has been replaced since 1953 by a successful control scheme.

77. To all those who have spent the last twenty years in Mauritius, it appears almost incredible that malaria which, until not so long ago, caused the death of 5 to 6 per thousand of the population year after year now accounts for 1 per 20,000, while admissions to hospital because of that disease which on the average numbered 3,000 per annum amounted only to 3 in 1954.

The deaths ascribed to the disease per 1,000 living from 1945 to 1954 were as shown hereunder:—

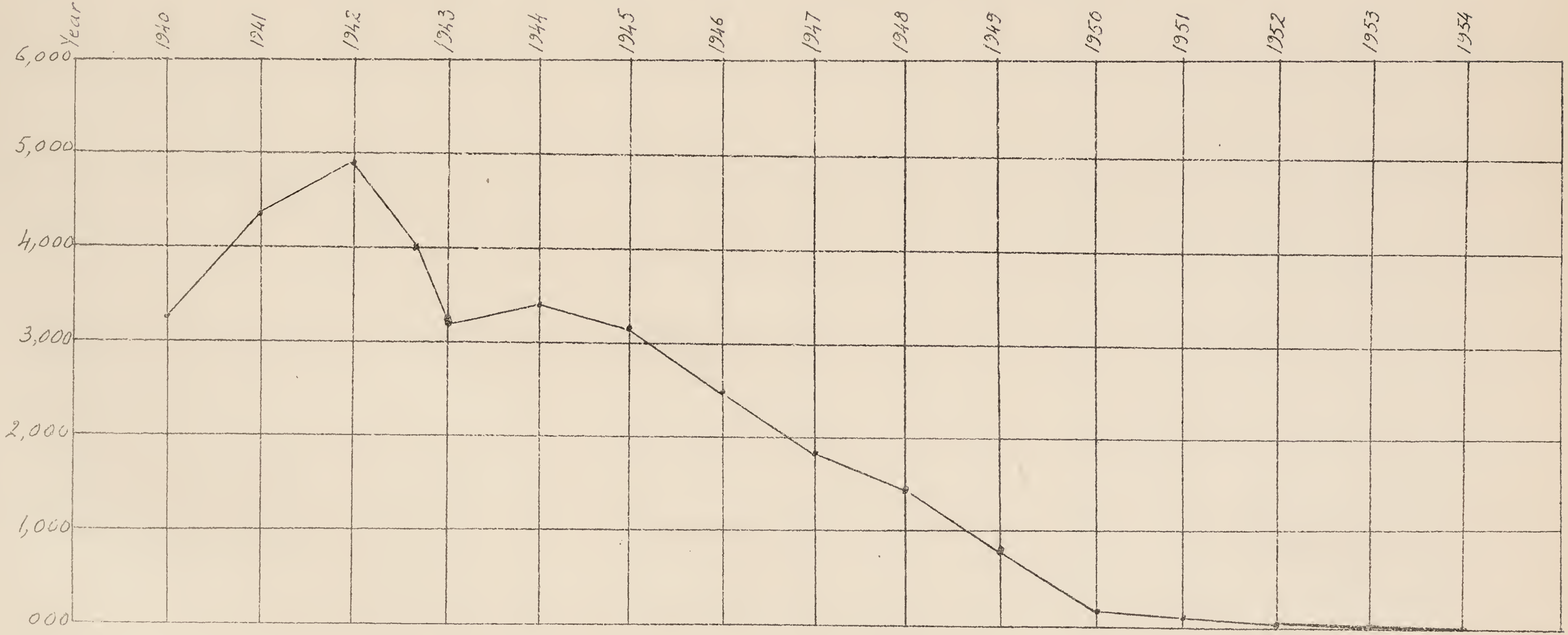
Year	*Deaths ascribed to malaria*	*Rate per 1,000 population*	*Percentage of deaths due to malaria to total deaths*
1945 ...	3,534	8·34	23·13
1946 ...	2,918	6·88	23·29
1947 ...	1,782	4·12	20·53
1948 ...	1,580	3·58	15·02
1949 ...	936	2·11	12·68
1950 ...	388	0·83	6·01
1951 ...	285	0·59	3·95
1952 ...	188	0·37	2·52
1953 ...	61	0·12	0·73
1954 ...	27	0·05	0·32

The hospital figures being the most accurate that can be produced by the Department, the following table indicates the number of malaria cases treated in the hospitals for period 1945–54. The graph at Figure V demonstates the reduction in hospital admissions since 1938:—

Year	*Cases of malaria treated in hospitals*	*Deaths in hosptials*	*Case mortality*
1945 ...	... 3,244	148	4·57
1946 ...	... 2,522	106	4·20
1947 ...	... 1,989	76	3·82
1948 ...	... 1,576	66	4·19
1949 ...	... 804	43	5 35
1950 ...	... 209	10	4·78
1951 ...	... 98	4	4·06
1952 ...	... 3	—	—
1953 ...	... —	—	—
1954 ...	... 3	—	—

FIGURE V.

ADMISSIONS TO HOSPITAL—MALARIA—1940-1954



78. The residual spraying season which had begun in September 1953 ended in April, 1954. D.D.T. was used in the coastal areas of the island and B.H.C. was sprayed in the outskirts of Port Louis twice in the season. A total of 38,628 houses comprising 187,641 rooms were sprayed in this season and the quantity of insecticide used was 8,664 lbs of B.H.C. powder ; 14,296 lbs of D.D.T. powder and 558 gallons of " Supona D " concentrate. Between May and October the only residual spraying carried out was in such buildings as public markets, hospitals, police stations, orphanages, etc. and Plaisance airport. When not engaged on spraying in these months the staff gave assistance to the Malaria Engineering Works Branch.

In November, 1954, the residual spraying season began again, the total sprayed up to the 31st December, 1954, being 14,103 houses or a total of 66,991 rooms. Only D.D.T. has been used.

79. Adult mosquito searching was carried out by members of the staff of the Insect Borne Diseases Division between the 8th June, 1954 and the 7th July, 1954, pyagra in kerosene being used as a knock-down insecticide. This work was effected at dawn in 886 houses and 805 cowsheds situated in 144 different villages all over the island. The mosquitoes caught were subsequently identified by the Entomological Branch. A total of 12 adult *Anopheles gambiae* were collected from all the houses and 151 from the cowsheds.

The Research Entomologist searched 1,492 houses in areas of intense *A. gambiae* breeding. 73 unfed and 5 blood fed *gambiae* were found. The latter were positive for cattle blood. The average anopheline density for houses is very low indeed: 0·05 ; the average anopheline density for cowsheds approximates to 20·00.

80. Malaria surveys, intended to watch developments, continued to be one of the most important activities of the Organization.

First of all, the Survey Unit is responsible for taking blood slides from children under 3 years of age who live in the coastal areas of the island. During the year 12,663 such slides were taken and 32 found positive for one of the species of human plasmodia.

By districts the carriers are divided as under:—

District	*S. T.*	*B. T.*	*Q. T.*	*Total*
Pamplemousses	3	1	2	6
Rivière du Rempart	4	1	1	6
Port Louis	2	—	—	2
Black River	2	1	4	7
Savanne	8	2	1	11
Grand Port	—	—	—	—
TOTALS ...	19	5	8	32

Suspected cases of malaria notified by doctors, hospitals and dispensaries were visited. 193 slides were taken and 14 found positive as under in respect of districts:—

District	*S.T.*	*B.T.*	*Q.T.*	*Total*
Black River	9	2	—	11
Plaines Wilhems	1	—	1	2
Flacq	—	1	—	1
TOTALS	10	3	1	14

The months of April and May being considered as the most likely months to find the maximum number of malaria infections, a survey was conducted between the 26th April and the 4th May in the areas where previously the disease had been most prevalent. 8,000 slides were taken from persons of all ages and 37 were positive:—

18 for S.T., 6 for B.T., 13 for Q.T.

In August 2,000 slides were taken from persons residing in areas not covered by residual spraying: four were found positive for S.T.

Adults noticed as appearing unwell during the infant survey gave 102 blood slides with 2 positive for S.T.

Persons living in the neighbourhood of other persons having plasmodia in their blood gave 647 slides, of which ten were found positive for S.T.

Where numerous carriers were found residing in the same locality, special surveys were made to trace other carriers. 8,089 such slides were examined and 35 were positive: 21 for S.T., 8 for B.T., 6 for Q.T.

All cases reported as positive were treated with either chloroquine or Daraprim.

Malaria entering Mauritius was not overlooked and blood films were taken from soldiers and their families arriving from East Africa and from members of the Royal Pioneer Corps returning from the Middle East. A total of 1,672 slides examined yielded 20 positive for S.T., 1 for B.T. and 5 for Q.T.

81. The Entomology Research Section functioning under a grant from Colonial Development and Welfare Funds continued to perform very valuable work. The report of Mr J. G. Halcrow, M. Sc., the entomologist in charge, is at Appendix III.

In light of findings in Mauritius, a point of importance must be stressed. *A. gambiae* is more active during the evening hours when a great part of the population is out-of-doors and there is no need for *gambiae* to enter houses to come into contact with man.

82. The programme of engineering works continued to be followed in the districts of Port Louis, Pamplemousses, Moka and Plaines Wilhems and a summary of the main items attended to is given hereunder:—

1. *Pamplemousses*

Mon Gout.—A marsh of about 1½ acre has been drained ; half of this marsh has been filled up.

The rivulet itself has been canalised on the whole of its course, i.e. 6,000 running feet.

Powder Mills.—A new drain has been canalised near the Royal Alfred Observatory where *A. gambiae* was breeding.

Mon Rocher.—A small marsh of about ¼ acre has been filled up and the rivulet has been canalised on a length of 1,500 ft.

St. Louis Stream.—The main and side drains have been completed.

2. *Plaines Wilhems*

Camp Fouquereaux.—The canalisation has been completed at Feeder Terre Rouge.

Forest Side.—Canalisation has been completed on Gangah drains.

Eau Coulée.—The marshy land there has been completely drained.

La Louise.—One new concrete bridge has been erected over a deep drain.

Curepipe.—Ruvulet Gros Cerf has been dealt with.

At Lees St.—a new drain has been completed and the marshy land completely drained. Concrete was used for the walling and the joints were cemented.

At Willoughby Street. a new drain has been completed on 505 feet ; a French Drain on a length of 660 feet.

3. *Port Louis*

Cassis Drain.—This has been attended to on a length of 600 ft..

Bain des Dames.—New drains have been dug on a length of 1,300 feet.

Hussard Drain.—A new drain has been completed on a length of 800 feet.

Sable Noir.—New drains have been completed on a length of 800 ft., with concrete slabs of 7 ft., and a new bridge erected (20′ × 14′ × 13″). Side drains have been provided on a length of 362 feet.

Riche Terre.—Canalisation has been completed on a length of 1,000 feet.

Menagerie Drain.—Canalisation has been completed on a length of 4,000 feet.

Plaine Lauzun.—Canalisation has been completed on a length of 350 feet.

83. The Malaria Advisory Board of which the Director of Medical Services is the Chairman met on five occasions. I am most grateful to the members for their constant help and advice throughout the year.

84. *Filariasis.*—29 cases were treated in hospital and 68 in dispensaries.

85. *Enteric fever.* The cases of this disease notified in the year 1954 numbered 88, equivalent to an incidence rate of 0·16 per 1,000 of the population as compared with 108 cases notified in 1953, equivalent to an incidence rate of 0·21 per 1,000 of the population.

The number of deaths amongst these 88 cases was 10, giving a case mortality of 11·36 per cent as compared with 11 and 10·18 per cent for the previous year.

The incidence of this disease per 1,000 of the population and the case mortality for the past five years were:—

Year		*No. of cases notified*	*Rate per 1,000 of the population*	*Case Mortality per cent*
1949	... ...	316	0·711	16·77
1950	... ...	319	0·686	15·98
1951	... ...	326	0·67	15·95
1952	.. ...	252	0·502	7·54
1953	... ...	108	0·21	10·18

The liberal use of chloramphenicol in the treatment of the disease has reduced the case mortality and the results would be still better if all the cases came up for treatment early enough. Vaccination against enteric fever is carried out on a fairly large scale.

86. *Diphtheria.*—The cases of this disease notified in the year numbered 69, equivalent to an incidence rate of 0·13 per 1,000 of the population.

The number of deaths among the 69 cases was 5 giving a case mortality of 7·24 per cent.

The following figures indicate the number of cases of diphtheria notified, the incidence rate and the case mortality for the previous five years:—

Year		*No. of cases notified*	*Incidence rate per 1,000 population*	*Case mortality per 100*
1949	...	154	0·346	14·28
1950	...	96	0·206	9·37
1951	...	88	0·18	19·31
1952	...	73	0·145	13·70
1953	...	62	0·12	6·45

87. *Erysipelas.*—There were 3 cases notified during the year, with 2 deaths.

88. *Small pox.*—The last case of this disease occurred in Mauritius in 1913. Vaccination is compulsory:—

Vaccinations performed were	14,570
Successful vaccinations on first attendance ...	13,850
Successful vaccinations on second and subsequent attendances	483
	14,333
Unsuccessful vaccinations	216
Not observed	21
TOTAL ...	14,570

66.45 per cent of the children born were vaccinated by Medical Officers of the Department.

89. *Tuberculosis.*—During 1954, 313 cases of tuberculosis were notified as compared with 369 for 1953, 350 for 1952 and 481 for 1951. 133 deaths were attributed to tuberculosis: 127 of the respiratory system, 5 of the meninges and central nervous system and 1 of bones and joints. In 1953, there were 146 deaths: 142 of the respiratory system, 3 of the meninges and central nervous system and 1 of the vertebral column.

The following indicates the deaths per 100,000 of the population from tuberculosis of the respiratory system for the 10-year period 1945–54: —

Year	*Deaths per 100,000 of the population*
1945	55·24
1946	45·49
1947	38·39
1948	60·20
1949	65·24
1950	50·78
1951	49·00
1952	40.08
1953	28·26
1954	25·07

90. The work of the Tuberculosis Division was carried under the guidance of the Tuberculosis Specialist who was responsible for the B.C.G. vaccination and also had the care of the tuberculosis cases in the hospitals.

In the early part of the year, Dr. D. R. Thomson of the World Health Organisation"s Tuberculosis Section visited the island. He arrived on the 13th March and left on the 17th March, the purpose of his visit being to obtain first hand information of the state of our tuberculosis services. His fact-finding mission was a preliminary step to the visit by a team from World Health Organisation to help us in tuberculin testing and B.C.G. vaccination of the population.

In September, 1954, the Tuberculosis Specialist attended the XIIIth International Congress of Tuberculosis in Madrid and Barcelona as a delegate of the Government of Mauritius. He returned to the Colony in October.

In October also, Dr. M. Dan, M.R.C.P., T.D.D., who had been appointed Assistant Tuberculosis Officer arrived in Mauritius to take up his post.

91. *B.C.G. Vaccination:* —

(a) *Schools.* In 1954, the work of testing and vaccination of school children was carried on lines similar to those of the previous year. All the Government and Aided Schools in Rivière du Rempart, Pamplemousses and Port Louis were covered, and the schools in Moka which were attended to at the beginning of the Campaign were re-visited.

(b) *Hospital Staff.*—The work of testing and vaccination of all nursing students and other members of hospital staff was carried out during the year and this was supplemented by yearly X-ray photographs of the chest of the nurses and dressers.

(c) *Contacts and new-born babies.*—Contacts of tuberculous cases were tested every month at Civil and Floréal Hospitals and vaccination done. New born babies were also attended to at the same session and this activity of the branch is proving its usefulness to general practitioners and members of the public.

(d) *Vaccine.*—The vaccine used was the Lyophilised Freeze Dried obtained from the Pasteur Institute, Paris. On reception, the vaccine is kept in a refrigerator at O°C. and is always transported on ice in a thermos flask for vaccination. It is also protected from light throughout and during vaccination.

In 1953, owing to bad local reactions caused by the standard vaccine, the Pasteur Institute of Paris prepared a special B.C.G. Vaccine (Lyophilised passed on bile) for use in Mauritius. The conversion rate with the vaccine being low (59·6 per cent), we have reverted to the standard vaccine (Freeze Dried) from Pasteur and the conversion rate for 1954 was 70 per cent.

(e) *Ulcers.*—There was no anxiety caused by the post-vaccinal reactions. These were within the normal limits for the vaccine used. There was no glandular enlargement following vaccination.

(f) *Visits by Nursing Staff.*—All schools were visited regularly by the nursing staff after vaccination and the visits were continued until all reactions had healed.

During the year, 855 visits were made and 15,309 dressings were applied.

The figures below show the work done in 1954:—

	Routine				
	Children to School Leavers	*Adults*	*Contacts*	*New Born to 1st Year*	*Total*
Tests	14,028	379	1,252	76	15,735
Re-tests	4,252	—	10	—	4,262
Vaccinations ...	8,076	92	294	23	8,485

The following table gives an analysis of the tuberculin sensitivity amongst the persons tested:—

Analysis of 13,218 Tests (1st January, 1954 to 31st December, 1954, According to Age Groups

Age	*Total*	*Positive*	*Negative*	*% of Positive*
0–1	76	33	43	43·4
2–4	175	96	79	54·8
5–9	8,529	2,649	5,880	31·0
10–14	3,938	1·403	2,535	35·6
15–19	153	109	44	71·2
20–24	139	102	37	73·3
25–29	61	51	10	83·6
30–34	29	25	4	86·2
35–39	51	45	6	88·2
40+	67	62	5	92·5
Total ...	13,218	4,575	8,643	

92. This paragraph sets out the available information regarding tuberculosis notifications and deaths for the year 1954.

The total number of persons on the Tuberculosis Register at the end of 1954: 2,837.

Total number of cases notified in 1954: 315.

The accompanying tables give an analysis of the notified cases and deaths according to districts and population groups (Table IX).

Table X gives the deaths classified according to age and population groups.

93. This paragraph deals with the clinical work done by the Tuberculosis Specialist and his assistant.

Pending the construction of a Sanatorium, a number of wards have been set aside at Civil and Victoria Hospitals for the treatment of pulmonary tuberculosis cases, whilst at Floreal Hospital about 50 beds are occupied by cases of tuberculosis of bones and joints.

The number of beds available for tuberculous cases at Civil and Victoria Hospitals is just over 100. In addition to these beds, all the district hospitals have set aside accommodation for pulmonary tuberculosis cases.

Every week there are two out-patients clinics and two ward visits at Victoria and Civil Hospitals.

Floreal Hospital is visited once a week and patients from the district hospitals are seen at regular intervals at the two main hospitals.

The types of cases seen range from the very early minimal lesion to the advanced bilateral disease.

The patients when admitted are treated on a Sanatorium routine, and given chemotherapy. Minor form of pulmonary collapse (A.P. or P.P.) is done on a fairly extensive scale and after discharge the patients attend weekly for refills either at Victoria Hospital or Civil Hospital.

The following table is an analysis of the work done at Civil Hospital during the year 1954.

The corresponding figures for Victoria and Floreal Hospitals are not available as the returns for tuberculous cases seen and treated there are included in the total returns of these centres.

	Work performed at Civil Hospital		
Indoor	*Male*	*Female*	*Children*
No. of patients with pulmonary tuberculosis treated	77	55	6
Tuberculous meningitis	—	—	1
Bronchiectasis	1	1	—
Lung abscess	2	—	—
Pleurisy	6	1	—
TOTAL	86	57	7

Indoor	*Male*	*Female*	*Children*	*Total*
No. of deaths in hospital due to tuberculosis	3	2	1	6
No. of beds fully occupied with T.B. patients	35	30	7	62
No. of pneumoperitoneum done ...	—	—	—	848
No. of phrenic crushes done ...	—	—	—	20

Outdoor

New cases—pulmonary tuberculosis	169
Return visits pulmonary tuberculosis	928
Investigation cases—(non pulmonary)	29
Return visits investigation cases	26
Other forms of T. B. e.g. bones and joints	15
Pulmonary fibrosis (healed tuberculosis etc.) not notified ...	15
Non tuberculous pulmonary disease (asthma, bronchiectasis, etc.)	126
Return visits of non tuberculous pulmonary cases	132
TOTAL ...	1,440

No. of pneumoperitoneum carried out on patients after discharge from hospital 1,481

94. *Leprosy.*—This disease has ceased to be a public health problem in Mauritius and the last case detected in a child dates back to 1932. It is hoped that within the next few years the dependency of Rodrigues will be in the same favourable position.

Lepers are treated at the Leper Settlement, Powder Mills, in the district of Pamplemousses. The figures below give the number of patients under treatment at the beginning of the year as well as the number of admissions, discharges and deaths:—

	Males	*Females*	*Total*
Remaining on 1st. December 1954	30	16	46
Admissions	2	—	2
	32	16	48
Discharges	5	1	6
Deaths	1	—	1
Remaining on 31st December 1954	26	15	41

Of the two patients admitted, one was a case of Lupus Erythematosus arriving from Rodrigues on a mistaken diagnosis.

The patient was returned to Rodrigues by the next available steamer.

The other case was a re-admission of a former patient who sought treatment for trophic ulcers and who, after a short stay, was discharged as he is non-infectious.

The two admissions during the year were discharged as already stated, after a short stay. The three other male patients (two from Rodrigues and one from Mauritius), were discharged as they were apparently cured.

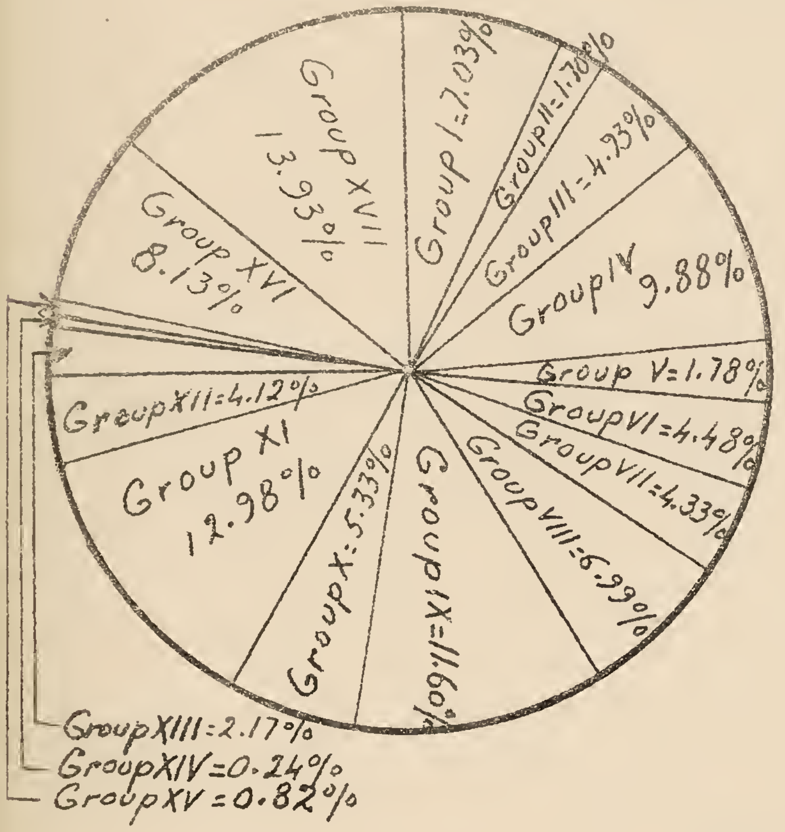
The female patient, also from Rodrigues, was returned to the Dependency as apparently cured.

YEAR 1954

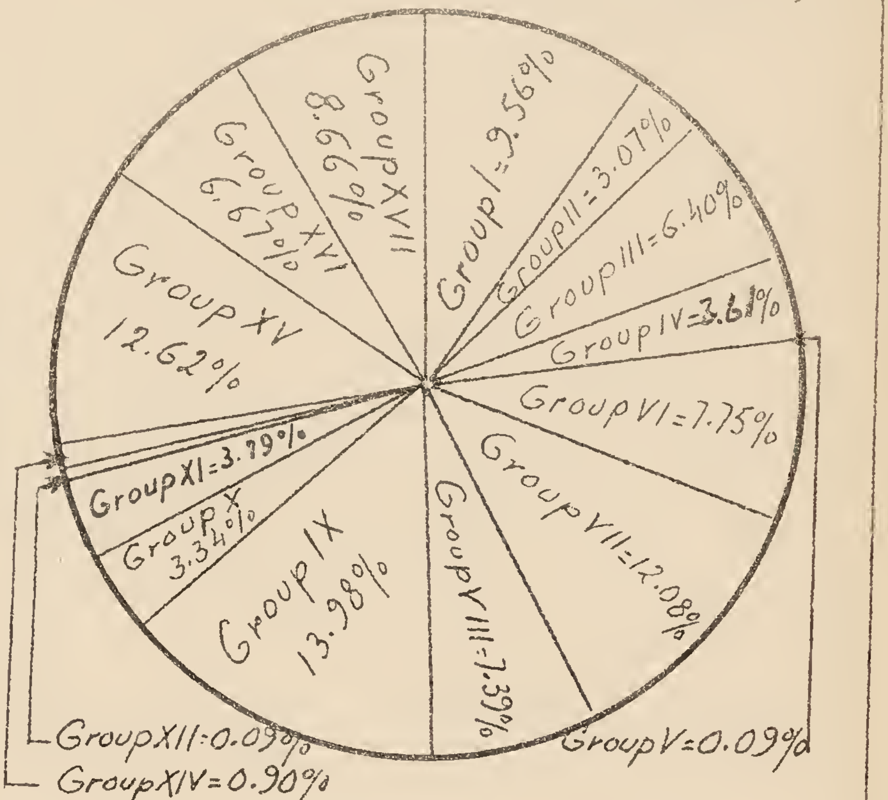
Proportion in percentages of diseases in hospital, by sections of the INTERNATIONAL STATISTICAL CLASSIFICATION of diseases, 1948, to total cases treated in hospital.

Proportion in percentages of deaths in hospital, by sections of the INTERNATIONAL STATISTICAL CLASSIFICATION to total deaths in hospital.

Total Incidence=26,660



Total Deaths=1,109



Reference

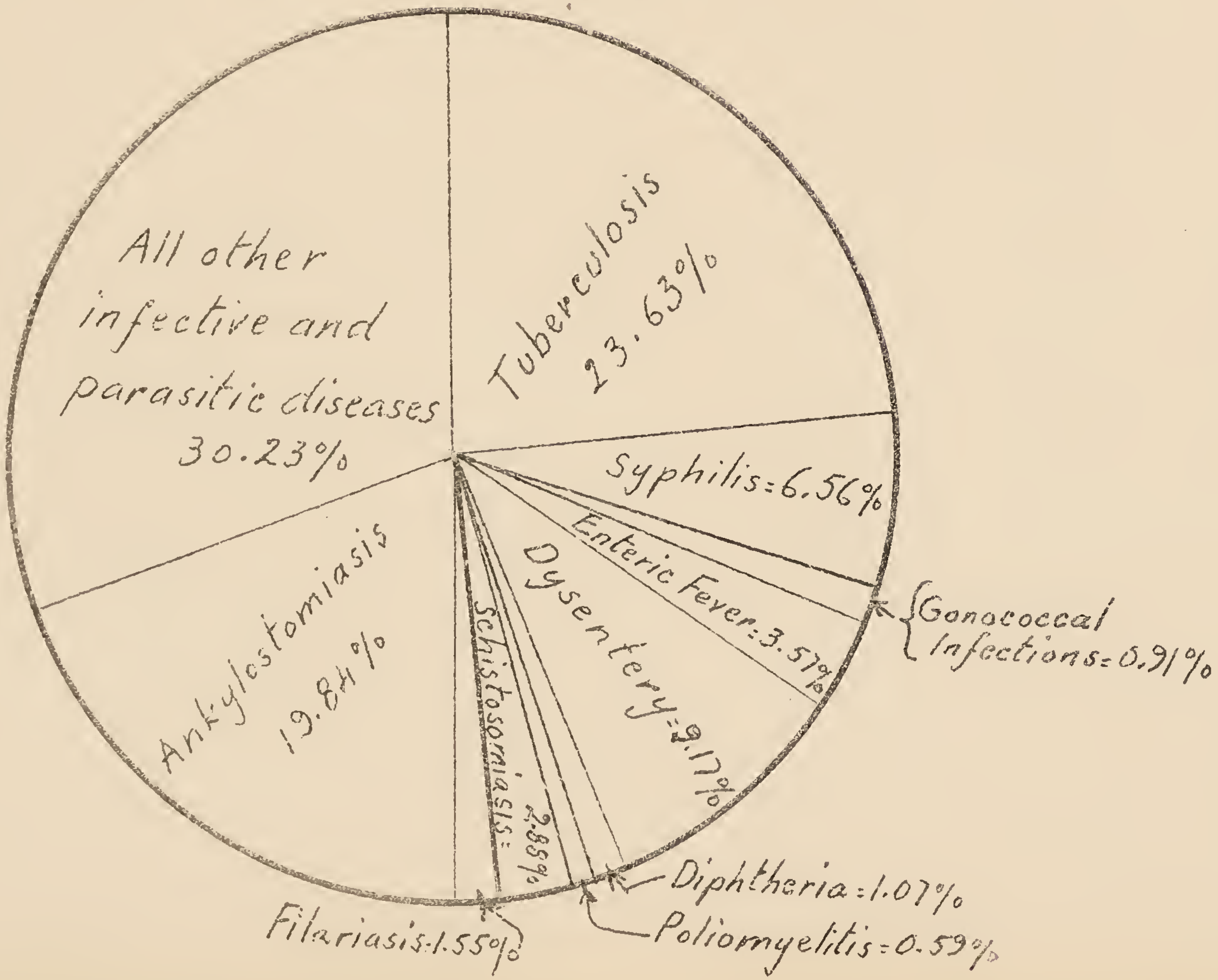
GROUP I. Infective and Parasitic Diseases.
GROUP II. Neoplasms.
GROUP III. Allergic, Endocrine system, Metabolic and Nutritional Diseases.
GROUP IV. Diseases of the blood and Blood forming organs.
GROUP V. Mental, Psychoneurotic and personality disorders.
GROUP VI. Diseases of the nervous system and sense organs.
GROUP VII. Diseases of the circulatory system.
ROUP VIII. Diseases of the respiratory system.
ROUP IX. Diseases of the digestive system.
ROUP X. Diseases of the Genito-urinary system.
ROUP XI. Deliveries and complications of Pregnancy, Childbirth and the Puerperium.
ROUP XII. Diseases of the skin and cellular tissue.
GROUP XIII. Diseases of the bones and organs of movement.
ROUP XIV. Congenital Malformations.
ROUP XV. Certain diseases of early infancy.
ROUP XVI. Symptoms, Senility and ill-defined conditions.
ROUP XVII. Accidents, Poisonings and Violence.

YEAR 1954

FIGURE VII.

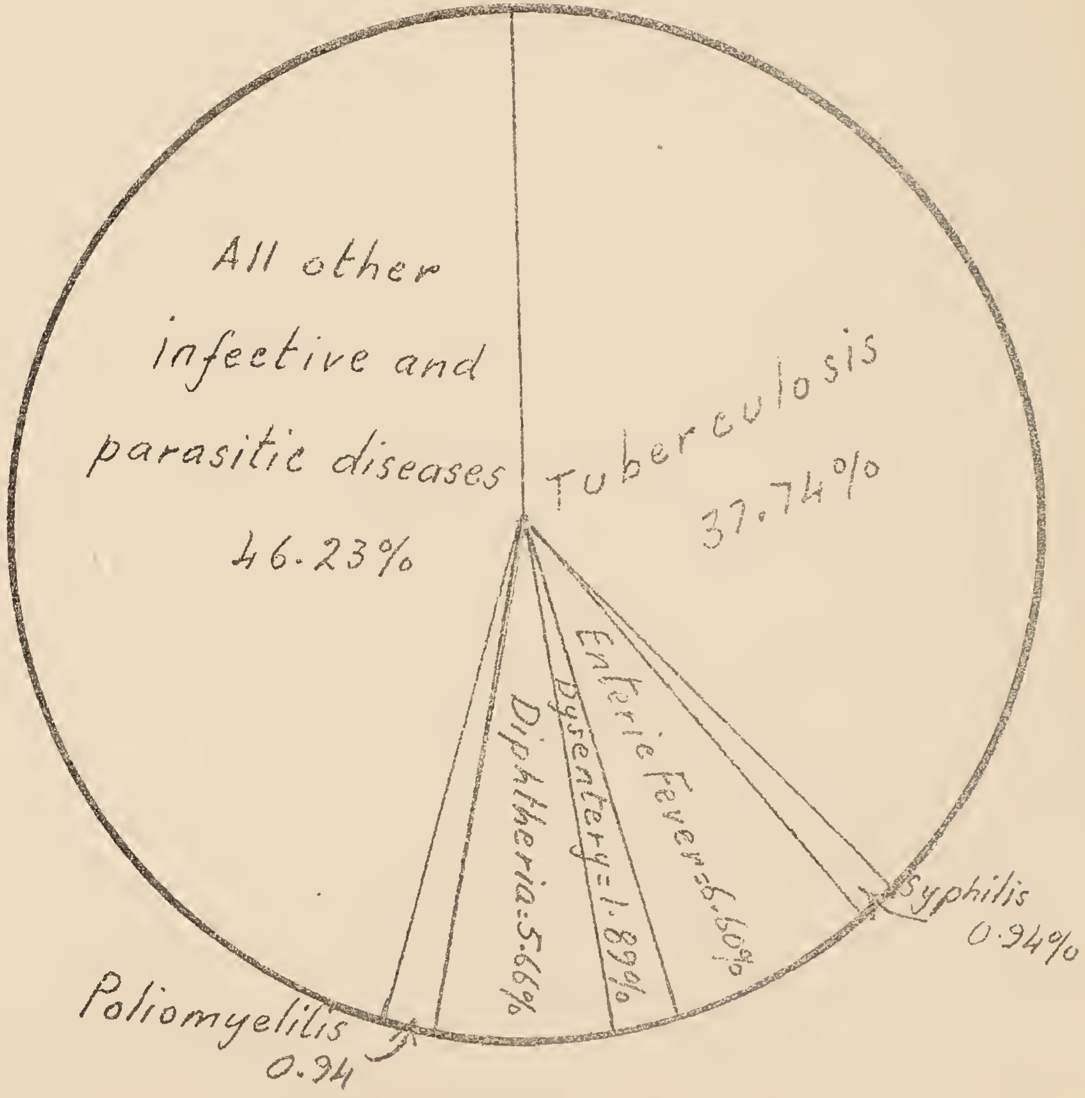
Proportion in percentages of certain infective and parasitic diseases treated in hospital to total cases of infective and parasitic diseases treated. Section I of INTERNATIONAL STATISTICAL CLASSIFICATION of diseases, injuries and causes of death.

Total Incidence=1,875



Proportion in percentages of deaths in hospital due to certain infective and parasitic diseases to total deaths in hospital, due to infective and parasitic diseases.

Total Deaths=106



One death occurred in an old patient and the cause of death was heart failure.

The health of the patients remained remarkably good during the year, and steady progress was noted in all patients amenable to treatment.

95. *Poliomyelitis*.—11 cases were notified during the year under review.

96. *Venereal diseases*.—123 cases of admission for syphilis and 1 death were recorded from the hospitals. 17 cases of gonococcal infection were treated. From the out-patients' clinics and dispensaries, 512 cases of syphilis and 94 cases of gonococcal infection were reported.

97. *Ankylostomiasis*.—372 cases were treated in hospitals and 9,907 cases in the dispensaries. These figures are in no way reliable because a large number of cases of anaemia seen in both dispensaries and hospitals are registered as hookworm disease and dealt with by deworming. Nutritional anaemia is constantly confused with hookworm anaemia.

98. *Schistosomiasis*.—54 cases were treated in hospitals and 442 at the dispensaries.

99. *Measles*.—Early in the year the island had a visitation from measles which followed an epidemic of whooping-cough in 1953. Cases were numerous, but it is difficult to state exactly how many persons fell victims to the disease.

Evidence of the direct and indirect damage it did is reflected in the death table published earlier in this report in respect of children under five years of age. The hazard to child life of diseases such as whooping-cough and measles need not be emphasized. 151 deaths were registered as having been directly caused by measles.

100. Figure VI shows the proportion in percentages of diseases treated in hospital to total cases treated, according to the sections of the 1948 International Classification of Diseases, while Figure VII illustrates the proportion in percentages of certain infective and parasitic diseases treated. Table XI indicates the number of cases of notifiable diseases by districts for the year 1954 and Table XII the monthly notifications.

B. Nutrition and Nutritional Diseases

101. The following nutritional diseases were recorded during the year:—

Diseases	*In Hospitals (cases)*	*At static dispensaries (cases)*	*At mobile dispensaries (attendances)*
Beriberi	—	2	—
Pellagra	110	409	1
Scurvy	2	1	6
Other deficiency states ...	391	2,422	3,725

102. The incidence of anaemia in the hospital population is a question calling for special investigation.

When malaria was prevalent and hookworm disease was widespread, it was quite natural to ascribe to those two diseases the occurrence of anaemia. They were believed to be mainly responsible for the causation of the disease, pregnancy and malnutrition acting as contributory factors. The frequent association of hepatic and splenic enlargements with anaemia seemed to support this causation of anaemia by malaria.

With the virtual eradication of malaria and the control of hookworm disease, there has been no reduction in the number of cases of anaemia treated as in or as out-patients in Government institutions. Indeed, the figures in Table XIII show that there has been a notable increase. These figures however must not be taken too literally because before the malaria eradication campaign which began in 1949 and the improvement in the sanitary conditions of the Colony which has been such a notable feature of the past five years, cases of anaemia were apt to be labelled malarial cachexia or hookworm disease. The figures show, nevertheless, that there has been no reduction in the incidence of anaemia to match the overall improvement in the health conditions of the country which has taken place within the last five years.

There can be no doubt that dietary deficiencies are the main cause of anaemia, with more particular reference to the protein constituent of the diet.

Mauritius produces but a fraction of its food requirements, and has to draw from a very wide area for its essential food supplies. The limitation imposed on the import of food is the purchasing power of a country as a whole and of the individual members thereof. The food imports of Mauritius, which during the war years had dropped considerably, are now increasing. Table XIV shows figures taken from the Year Book of Statistics for 1952 and 1953. Even after taking into consideration locally produced food, it is evident from these figures that protein food which is being consumed is deficient in quantity. A rough estimate is that for every 100 grammes of carbohydrate consumed not more than 6 grammes of protein are used. The correct proportion should be between 12 and 14 grammes of protein for every 100 grammes of carbohydrate and this applies with greater force in the case of the growing child.

From all reliable evidence, the nutritional problem in this country may be stated as follows: —

Apart from anaemia which is evidently widespread and affects women in the child-bearing age group chiefly, there is a certain amount of undernutrition and malnutrition in the people of the lower income groups.

The fully developed syndrome of Kwashiorkor whilst not unknown in Mauritius is of comparatively rare occurrence. It affects a small number of children of pre-school age, but cases of hunger oedema and caloric deficiency in young children are by no means rare. Furthermore, retardation of growth and reduction in weight and some degree of anaemia are not uncommon in children of pre-school age. When it is realised that the biochemical and pathological manifestation of malnutrition in childhood may have repercussions on the health of the adult, the importance of having a nutritional policy for the growing child becomes clear

The manifestations of malnutrition in the adult are limited to sub-clinical types chiefly, the gross manifestations being inconspicuous.

The post of Nutrition Officer, which had been created under the Development and Welfare Programme, was abolished by a decision of the Legislative Council when the 1951–52 Estimates were under consideration and since then it has not been possible to carry out any work on nutrition. Steps are being taken to have a scientific investigation conducted at the earliest possible opportunity.

C. Food in Relation to Health and Disease

103. *Food Supplies.*—The quantity and quality of food available to the island's population remains one of the essential preoccupations of the health services. On the whole, the foodstuffs offered to the public are of good quality, but the food situation is not yet very satisfactory. The cost of essential basic foodstuffs is still high. Animal protein is not easy to obtain and still less at a reasonable price: butcher's meat was under control until April, 1954, and is sold at a price which makes it difficult for the lower income groups to buy in sufficient quantity ; fish, in greater demand than in prewar days, is not procurable in plenty ; eggs are scarce and tend to become scarcer at certain times of the year when epizootic diseases cause havoc among poultry ; not enough milk is produced. On the other hand, green vegetables are not as plentiful as before and cost a lot. As the result of the higher prices paid for sugar, land formerly used to produce foodcrops, the market price of which was accessible to the majority, is now supporting sugarcane.

104. The relation between food and health is of the greatest importance in Mauritius, where, as in other communities, most of the population depend on others for the provision and preparation of their food needs. Difficulties are experienced with most of the eating places, stalls and itinerant hawkers, the latter being frequently a menace to school children during their recreation time. The food inspectorate is very active and carries out systematic inspections of food and associated premises. It is however hopeful to note the appearance of a few up-to-date food and drink producing factories which may stimulate other producers to pay greater attention to clean surroundings and to proper methods of production. Unfortunately problems remain with the older establishments engaged in the production and supply of bread, biscuits and sweets and with the milk trade.

105. The conditions under which fresh milk is sold and the adulteration to which this commodity is regularly subjected have remained throughout the years a disquieting feature in the local background. With a view to exercising closer and better supervision over milk producers and sellers, a special Milk Unit was created in the Department under the direction of a Senior Sanitary Inspector. The Unit started work on the 17th December, 1953 and Table XV is a summary of the work performed during 1954. Altogether 786 samples were sent to the Government Chemist for analysis, of which 482 did not comply with the requirements of the Milk Trade Regulations. In other words, 61·3 per cent of the samples taken were bad.

As soon as the Unit started its work, the wholesale and retail price of milk was raised, but improvements in the quality did not take place immediately. By the end of 1954, it had become evident that the milk offered for sale in the populous districts of Port Louis and Plaines Wilhems, where sophistication used to be rife, was of a better quality and several of the disreputable milk sellers who were several times given court sentences had given up their trade. Table XVI is a summary of milk contraventions for the whole Colony during 1954.

It is gratifying to draw attention to the results achieved by the team engaged on the control of milk.

106. *Slaughter houses and markets.*—There are six public and one private abattoirs. The public slaughter-houses administered by the Municipality of Port Louis, the Town Councils of Curepipe and Rose Hill as well as the Government slaughter house at Flacq are each controlled by a qualified Veterinary Surgeon. In other places supervision rests with the sanitary staff.

There are 12 markets in the Colony.

D. GENERAL MEASURES OF SANITATION

107. *Health Inspection.*—On the 31st December, 1954, the Staff of Sanitary Inspectors consisted of:—

4 Senior Health Inspectors ;
13 Sanitary Inspectors, Grade I ;
38 Sanitary Inspectors, Grade II ;
1 Port Health Inspector.

For sanitary inspection purposes, the Port Louis municipal area is divided into six sections, Plaines Wilhems district into three sections and the remaining districts into seven divisions, which comprise a total of nine sections.

The inspections made by the Sanitary Inspectors during the year are listed in Table XVII. Table XVIII gives particulars of prosecutions entered at the instance of the Health Department.

108. *Scavenging and refuse disposal.*—During the year under review, improvements were noticeable in the services run by the Municipality of Port Louis and the Town Councils of Plaines Wilhems district. Several of the Village Councils run their own scavenging service under the guidance of the Civil Commissioners and of the Health Department. They are shouldering their new responsibilities with praiseworthy enthusiasm.

The Department and the Town and Village Authorities have to contend with a great variety of householders whose sense of tidiness and consideration for their fellow men vary very widely. At one end of the scale there is the rare individual meticulous in his observance of cleanly habits ; at the other end, the difficult citizen who has no sense of hygiene and who delights in throwing his refuse anywhere. The absence of proper dust bins continues to be a sore point and it is still too common to find refuse dumped on footpaths, in the street drains or in the streets themselves.

109. *Housing.*—The housing position remains critical. From the health point of view the shortage is related particularly to the lower income groups, and high cost of buliding is largely responsible for this state of affairs. Otherwise, the continued and rapid increase in population, the extension of social services and the expansion in trade and industry has resulted in the need for more dwelling-houses and accommodation. Finance on the one side and the inability of the building trade to expand much beyond a certain output per year on the other side, are factors which must be taken into account to explain why this Colony cannot yet reach stabilized development in the field of construction.

Encouraging features are that an increased number of low-cost housing schemes are being implemented in both urban and rural areas, that more dwelling houses are being put up by owners of sugar estates for their staff and that an improvement in the standard of construction is conspicuous.

It still happens that the Authorities are faced with the appearance of unauthorized and often insanitary structures, but with the growing health-consciousness this is becoming less frequent. Prospective builders now readily seek advice in order to obtain the best possible structure and the most satisfactory sanitary conditions for the money they can spend.

110. *Port Louis District*:—

Area :	District of Port Louis	16 sq. miles.
	Town of Port Louis	2·1 sq. miles.

Density per square mile:—

District of Port Louis	5,686
Town of Port Louis	26,167
Total population, estimated as at the 31st December, 1954	90,978
Live births	3,888
Birth rate per 1,000	43·5
Still births	267
Deaths	1,336
Death rate per 1,000	14·9

The Health Office for the District of Port Louis is administered by a Medical Officer of Health who is also Port Health Officer. The staff consists of one Senior Sanitary Inspector, seven Sanitary Inspectors and six disinfectors. A Port Health Inspector is in charge of port sanitary duties and is also responsible for anti-rodent measures for which he has a staff of thirteen.

The Harbour Disinfecting Station has a staff of seven to carry out disinfection and fumigation.

The following cases of infectious diseases were notified during the year:—

Diphtheria	9	Tuberculosis	214
Enteric fever	12	Poliomyelitis ...	1

The Scavenging Service is carried out by the Municipality which is also responsible for the water supply derived from Pailles Reservoir and distributed after chlorination following sand filtration. The sewerage system is under the supervision of the Public Works Department, the sewage being dealt with by disposal at sea. A number of pail and pit latrines are found in the extra urban area which is outside the sewerage area.

Table XIX summarizes the work done in Port Louis.

Table XX gives particulars of cases heard by the Magistrate of Port Louis at the instance of the Medical and Health Department.

111. *Plaines Wilhems district* :—

(a) Mid-year population:—

Year			*Population*
1946	...	...	124,319
1947	...	...	127,894
1948	...	...	131,263
1949	...	...	132,124
1950	...	...	138,023
1951	...	...	143,059
1952	...	...	149,627
1953	...	...	154,064
1954	...	...	158,147

(b) Deaths:—

Year			*Total*	*Death Rate per* $^{0}/_{00}$
1945	...	...	3,134	25·6
1946	...	...	2,394	19·5
1947	...	...	1,901	14·9
1948	...	...	2,524	19·2
1949	...	...	1,813	13·7
1950	...	...	1,655	12·0
1951	...	...	1,873	13·1
1952	...	...	1,920	12·8
1953	...	...	2,111	13·7
1954	...	...	2,214	14·0

(c) Births and still-births:—

Year			*Total*	*Birth rate*	*Still births*
1945	...	...	4,962	40·5	358
1946	...	...	5‘082	40·9	320
1947	...	...	5,638	44·1	314
1948	...	...	5,374	40·9	318
1949	...	...	5,635	41·9	322
1950	...	...	6,336	45·2	359
1951	...	...	6,423	44·8	362
1952	...	...	6,738	45·0	401
1953	...	...	6,683	43·4	423
1954	...	...	6,342	40·1	373

(d) Town of Curepipe:—

Area: 2.6 sq. miles
Estimated population as at the 31st December, 1954 : 23,750
Density per sq. mile : 9,135.

(e) Town of Quatre Bornes:—

Area : 1·8 sq. miles
Estimated population as at the 31st December, 1954 : 18,700
Density per sq. mile : 10,389

(f) Town of Beau Bassin—Rose Hill:—

Area : 2·2 sq. miles
Estimated population as at the 31st December, 1954 : 30,400
Density per sq. mile : 13,818

The district of Plaines Wilhems is divided into two sections, Upper and Lower Plaines Wilhems, each under the charge of a Senior Sanitary Inspector. All the work is supervised by a Medical Officer of Health. There are three Health Offices, one at Curepipe, one at Vacoas, one at Rose Hill.

Table XXI gives a summary of the sanitary work performed in Plaines Wilhems during the year 1954, whilst Table XXII gives particulars of the cases prosecuted at the instance of the Health Department in Plaines Wilhems District during 1954.

E. Anti-Rodent Operations

112. The advent of poisons in the field of rodent control has changed the entire aspect of that formidable problem. In the first instance, poison treatment can deal successfully with infestations which hitherto had been resistant to well organized trapping methods. Of course, the antiquated methods were impressive in so far as the actual number of rodents destroyed could be seen on the spot, whereas in the case of poison treatment a major infestation can be completely cleared without one ever seeing the traces of the rodents alive or dead. In this connection it can be mentioned that some people object to the use of poisons, as very often the rats die in partition walls and other inaccessible places thereby causing an abominable smell when the dead animals start decomposing. Again there is a psychological effect because when people do not actually see the ' kill ' they are sceptical about the results and it may take a few weeks before they are convinced.

This question of smell from dead rats can be satisfactorily dealt with if the approximate location of the corpse is known but cannot be reached. A solution of zinc chloride sprayed on the spot has been found to have good deodorising properties. Failing this, a weak solution of cresol or septol may be used.

Lately the anti-coagulant properties of Dicoumarol derivatives have been used in the fight against rats, with highly satisfactory results.

Trapping is still carried out in the whole of Port Louis, and special zinc phosphide poisoning is resorted to in the harbour area, the round being completed once every four months. There is always a risk of re-infestation in the areas treated with zinc phosphide and the use of Warfarin has proved of great value in dealing with this problem as well as with that created by the survivors of a first treatment.

The central market of Port Louis which had always been a sanctuary for rats is now regularly treated twice yearly. On the first occasion that this was done a large number of rats died in the drains and after some time created such a smell nuisance that the Fire Brigade had to be called in to flush the drains.

The only trouble so far with the Dicoumarol preparations is that they do not keep in damp places and soon go mouldy. The advice of the suppliers has been sought on this matter and information has been received that work is still going on with a view to finding a suitable additive to prevent decomposition in damp places.

On the whole, the problem of rat destruction is being energetically tackled. Hope can be expressed that though the rat population will not be completely cleared, it will at least be satisfactorily controlled.

The following table shows the number of rats caught during the ten-year period 1945–54:—

Year	Norvegicus	Rattus	Frugivorus	Alexandrinus
1945	849	14	145	7,687
1946	1,897	71	187	10,730
1947	2,760	54	65	10,829
1948	2,028	62	148	14,671
1949	1,875	62	365	17,286
1950	1,512	42	324	12,954
1951	1,142	24	282	5,796
1952	1,076	11	78	5,220
1953	1,356	23	44	5,025
1954	1,019	47	8	5,075

A claytonizer is available for the fumigation of imported cargo likely to harbour rats. The Government Granary is regularly fumigated with sulphur dioxide.

F. PORT HEALTH AND QUARANTINE

113.—*(a)* The ports on the Mauritius seaboard are Port Louis and Mahebourg, but all ocean-going vessels call at Port Louis. The Medical Officer of Health for Port Louis, assisted by the Port Health Inspector, is responsible for health measures in the port area.

No passenger coming from abroad was detained on account of any of the quarantinable diseases.

Table XXIII shows the work associated with the ships arriving in Port Louis during the year 1954. In addition, 3 deratting certificates and 10 deratting exemption certificates were issued.

The inspection of foodstuffs imported into the Colony continued in a routine manner throughout the year. As a result the goods listed below were found to be unfit for human consumption and seized accordingly:—

1 case macaroni
1038 bags potatoes
96 tins Cocktail sausages
48 tins Vienna sausages
3 bags bomblis
128 tins pilchards in tomato sauce
288 tins of liver paste
54 tins of grapes in syrup
40 bags dates
49 lbs snoek
5 cases of chocolate slabs
14 cases of salted pork
775 tins of fish paste
1 parcel pulses
1 carton confectionery
95 tons onions
4 packets dried eggs
5 bags split peas
3203 kgs. rice

(b) The airport is in the south of the island at Plaisance. It continued to be under the responsibility of the District Medical Officer assisted by a Sanitary Inspector. 200 civil aircraft arrived in the Colony with 3,234 passengers. Of these, 910 coming from infected areas were put under surveillance. All planes are disinsected on reaching and before leaving the airport. A mosquito-proof quarantine building has now been completed as an adjunct to the airport. The Quarantine Service is a vital one for this Colony and no trouble is spared to maintain adequate health safeguards at our gates. It is also imperative to ensure that the two mosquitoes *Anopheles funestus* and *Aedes aegypti*, which to all evidence have been eradicated, are not re-introduced in our midst.

G. WATER SUPPLIES

114. By the end of 1957 the water supplies of Mauritius will be unique in the world in that every inhabitant of the Territory will have at his disposal piped clean, pure water. While the formidable development of our domestic water supplies is going on, consideration is being given to the advisability of adding fluorine to the supplies. The waters of Mauritius are grossly deficient in fluorine and the problem of dental caries is a serious one.

(a) Mare-aux-Vacoas Water Supply Scheme

The Mare-aux-Vacoas supply is designed to serve a population which, it is estimated, will reach 252,000 around the year 1980. This population lives in the district of Plaines Wilhems, the greater part of Moka and Black River districts and the higher parts of Grand Port and Savanne districts and in part of the capital town of Port Louis. The supply will ultimately reach 8,320,000 gallons per diem. It is now nearly 7,000,000 gallons per diem.

The capacity of the reservoir with a catchment area of seven square miles, from which the supply is derived, is 3,750 million gallons at 1,850 feet above sea level. The first filters were constructed in 1892 for a supply of 1,000,000 gallons per diem. New filters were gradually added and the filtering area in operation at the present date is 124,000 square feet. The process employed is slow sand filtration. The water is chlorinated after filtration, chlorination having been introduced in 1930.

The Development scheme started in 1946 under the Development and Welfare Ten Year Plan included the construction of new filters, of service reservoirs and the placing of about 140 miles of new mains and service lines varying from 21″ to 3″ in size.

(b) Piton du Milieu Scheme

This Scheme is intended to serve a total population of 178,000:

34,000 in Pamplemousses and Rivière du Rempart districts.
84,000 in Moka and Flacq districts.
60,000 in Grand Port and Savanne districts.

The supply is derived from a storage reservoir of 680 million gallons capacity having a catchment area of about 2½ square miles at Piton du Milieu, 1,400 feet above sea level. The supply to be given is 4,000,000 gallons per diem and the process of purification includes sedimentation, filtration through rapid sand filters and chlorination.

The Scheme is being carried out under the Development and Welfare Ten Year Plan. It includes, besides the works mentioned above, the construction of service reservoirs and the placing of 236 miles of new mains and service lines from 18″ to 2″ in size. The storage reservoir and part of the pipe lines and service reservoirs have been completed. The filters and the remainder of the works are expected to be completed in the course of the 1956–57 financial year, when the numerous small existing supplies of untreated water on which the population now depends will be superseded.

(c) La Nicolière Scheme

This supply is derived from a stream, Rivière du Rempart, at La Nicolière at an elevation of 1,045 feet above sea level. The scheme was carried out in 1927–28 and was to supply 720,000 gallons per diem to part of the population in Pamplemousses and Rivière du Rempart districts. The supply is now to be limited to a population of 27,000, the remainder of the population in the two districts being served by the Piton du Milieu Scheme. There is no storage reservoir and the water is neither filtered nor chlorinated at present ; but a filtration plant for 1,000,000 gallons per diem by rapid sand filters and a chlorination plant are being put in hand under the Development and Welfare Ten Year Plan.

(d) Rivière des Galets Scheme

This Scheme is intended to provide a supply of 392,000 gallons per diem to a population of 14,500 in the district of Savanne between the villages of Souillac and Baie du Cap. The supply is to be derived from Rivière des Galets at an elevation of 825 feet above sea level. No storage is required. The water is to be filtered and chlorinated and the total length of pipes from 7″ to 2″ to be laid is 25½ miles. The Scheme has been put in hand last year.

(e) The Port Louis Water Supply

This supply is the responsibility of the Municipality of Port Louis, as opposed to the other supplies mentioned above which are governmental, but the quality is controlled by the Health Department. It is derived from Grand River North West and provides 5,160,000 gallons per diem to the population of Port Louis. The water is filtered and chlorinated.The supply was opened at the end of the last century, but great improvements were effected in 1927 and 1931, when filtration and chlorination were introduced.

115. The progress made in 1954 was as follows:—

(a) Mare-aux-Vacoas System

A service reservoir of 150,000 gallons capacity was under construction at the end of the 21″-16″-12″ main at Alma. A 6″ main 5½ miles long from the reservoir at Alma to Crève Coeur has been laid for the supply to Montagne Longue, Vallée des Prêtres and Ste Croix. A service reservoir of 45,000 gallons capacity at the end of this line was under construction of Crève Coeur. The pipe lines to Montagne Longue and Vallée des Prêtres were being laid. A 4″ line from Alma to Quartier Militaire has been laid which now supplies Mare-aux-Vacoas water to Quartier Militaire.

The two new filters which were under construction at La Marie last year have been completed and are to be put into operation early in 1955.

The construction of the service reservoir of 400,000 gallons capacity at Vacoas is nearly completed and the supply line of 12″ and 10″ pipes 2½ miles long has been completed. The pipe lines of 12″, 10″ and 9″ diameter leading from the service reservoir towards Candos and Rose Hill are in the course of laying.

The supply of Mare-aux-Vacoas water to Black River has been further extended by the laying of a 5″ pipe 3½ miles long to Tamarin, and a 3″ pipe to La Coupée Yemen. A service reservoir of 45,000 gallons is under construction on La Coupée Hill Yemen. The supply is to be continued to Black River, Case Noyale and Coteau Raffin. The extension of the supply to Midlands and Nouvelle France has been completed. A service reservoir of 150,000 gallons capacity is under construction at Nouvelle France, and the 6″ and 5″ pipeline from this reservoir to Pont Colville, Grand Bois and Bois Cheri is in the course of laying.

(b) Piton du Milieu System

The 16″ pipe line from Piton du Milieu to Cluny for the supply of Grand Port and Savanne Districts which is to be 6½ miles long has been laid on half its length.

Construction of the rapid gravity sand filters for the filtration of 4,000,000 gallons per diem has begun.

Several miles of pipe lines have been laid in Pamplemousses and Rivière du Rempart Districts at Pointe aux Piments, Mon Loisir and other localities, in Moka and Flacq Districts from Quartier Militaire to Mont Ida and Montagne Blanche, in Grand Port District at Rose Belle and Mon Trésor.

Two service reservoirs of 200,000 and 120,000 gallons' capacity have been constructed in Flacq district at Melrose for the supply of Montagne Blanche, Sébastopol, etc., and at L'Etoile for the supply to Trois Illots, Olivia, Belle Rive, etc., and one of 150,000 gallons capacity in Grand Port District at Rampe Le Moir for the supply of Plaisance Aerodrome, etc. Another of 150,000 gallons' capacity is under construction at Cluny at the end of the 16″ main from Piton du Milieu.

The laying of the 12″ main 6½ miles long from Quartier Militaire which is to supply Pamplemousses and Rivière du Rempart Districts with water from Piton du Milieu has been put in hand towards the end of the year.

H. SCHOOLS MEDICAL SERVICE

116. *General.*—The year saw the following notable developments:—

(a) A Mobile School Clinic started functioning in September.

(b) The teaching of hygiene at the Teachers' Training College and the medical examination of entrants became the responsibility of the School Medical Officer.

(c) All teachers leaving the Training College at the end of the year had an X-ray photograph of chest to exclude tuberculosis before being posted to a school.

(d) At the end of the year a third School Nurse was selected for appointment, to assume duties at the beginning of the next school year.

There has been a marked improvement in the cleanliness of the schoolchildren, but as regards health, the situation has remained nearly the same. If the island is considered regionally from the point of view of health the worst area is Grand Port—Savanne with 4·36 per cent of entrants suffering from anaemia and 34·5 per cent in " Poor General Condition ". The next worst is Moka—Flacq with 2·62 per cent anaemics and 29·9 per cent in " Poor General Condition ". The healthiest area is Port Louis with 0·86 per cent anaemics and 16 per cent in " Poor General Condition ".

At the end of the year 3,545 pupils were receiving a double ration of milk and 8 yeast tablets daily, as compared with 1,407 at the end of last year.

A survey carried out during the year revealed that 98·2 per cent of the pupils in attendance were taking their daily milk ration as compared with 96·4 per cent last year.

117. *Medical Work.*—It was possible to visit all the primary schools during the year. Some schools where the children were particularly unhealthy received 2—4 visits. In all, 17,388 pupils were examined as follows:—

Entrants ("Screening" only)	9,310
First Standard (Entrants not examined last year)	5,706
" Specials " ... ... —	880
Re-examinations	1,492
TOTAL ...	17,388

Below is a summary of the important findings district by district (Entrants only).

District	*No. Examined*	*Poor General Condition*	*Anæmia*	*Bitot's Spots (Vit. A. Deficiency)*	*Scabies*
		%	%	%	%
Grand-Port/Savanne	1,420	34·5	4·36	0·56	1·26
Moka/Flacq	1,870	29·9	2·62	0·16	1·06
Plamplemousses Riv. du Rempart ...	1,514	16·7	1·78	0·79	2·70
Plaines Wilhems ...	2,472	16·2	1·14	0·45	0·96
Black River	187	17·1	0·53	—	1·06
Port Louis	1,847	16·0	0·86	0·27	0·16

It will be noted that the incidence of anaemia is about 2½ times more in the rural areas than in the urban areas, and that the incidence of scabies is 3 times more.

Out of the 17,388 pupils examined:—

(a) 10·3 per cent needed medical treatment, including 76 who were referred for specialist treatment ;

(b) 6 were removed from school as they were suffering from pulmonary tuberculosis ;

(c) 11 needed immediate hospitalization for anaemia mostly ;

(d) 114 were contacts of pulmonary tuberculosis in the family ;

(e) 4 obtained financial assistance from the Assistance Commissioner for treatment ;

(f) 3,545 (2,074 entrants + 1,471 in other classes) were put on a double ration of milk and 8 yeast tablets daily at school ;

(g) The major defects dealt with were: " poor general condition ", anaemia, scabies, chronic ear discharge, asthma and defective vision.

All treatment was provided free.

II. In School Camp

During the period June to October, 31 visits were paid to the Holiday Camp at Cannoniers' Point and 1,682 pupils were "screened": 53 were found to require medical treatment, and 4 required hospital treatment for fractures sustained at play.

Visits were also paid to the Camps at Cannoniers' Point and Cap Malheureux when the Training College Students were sojourning there.

III. In the Three Government Secondary Schools

398 pupils were examined as follows:—

Entrants	196
Re-examinations	198
Specials	4

(a) 6·6 per cent of the Entrants needed medical treatment ;

(b) 35·9 per cent of the Entrants needed dental treatment ;

(c) 47·5 per cent had no vaccination marks against smallpox ;

(d) 10·0 per cent were of "poor general condition."

The pupils made their own arrangements for treatment.

IV. At the Teachers' Training College

At the beginning of the year 116 entrants were examined before being admitted to the College:—

One was found medically unfit.

45 per cent were found to require dental treatment.

27 per cent had no vaccination marks against smallpox.

At the end of the year 209 Entrants for 1955 were examined.

3 were found unfit.

26·3 per cent required dental treatment.

19·5 per cent had no vaccination marks against smallpox.

118. *Work of the School Nurses.*—In all, the Nurses paid 177 visits to all the schools. They attended at medical inspections and carried out health, cleanliness and vision surveys.

(a) Health Survey

They carried out a survey of 33,970 pupils and 1,313 of these were referred to the School Medical Officer.

(b) Cleanliness Survey

(i) 23,667 pupils were examined for dirty finger nails, nits and lice.

The findings were as follows:—

21·5 per cent had dirty finger nails ;

14·8 per cent had nits ;

7·1 per cent had nits and lice.

The corresponding figures for 1953 were 42·6 per cent, 21·9 per cent and 5·1 per cent respectively:—

(ii) 56,137 pupils were examined for handkerchiefs and toothbrushes.

The findings were as follows:

36·4 per cent had no handkerchiefs ;

14·5 per cent had no toothbrushes.

The corresponding figures for 1953 were 64·7 per cent and 21·7 per cent respectively.

(c) Vision Survey

In 69 schools the distance vision of 6,712 pupils in the third and sixth standards was checked and 142 were referred to the Medical Officer for further examination.

(d) Re-examination

128 schools were visited for follow-up of pupils under treatment. 2,434 such pupils were examined and 600 were treated.

(e) Cleansing Work

Constant vigilance was maintained by the nurses throughout the year, and the improved figures for cleanliness are largely due to this. The cleansing work was accelerated when the Mobile Clinic started functioning in September.

Schools are supplied with either " D.D.T." or " Gammexane " emulsion for cleansing heads, and parents of infested pupils can either borrow a nit comb from the school or they can buy it from the Education Office Headquarters through the Headteacher of the school. It is realised that the schoolchild is a member of a family and hence treatment for nits and lice is also given free to the child's family.

The nurses gave talks and demonstrations in a few schools and Social Welfare Centres to mothers of school children on personal hygiene.

During the year 133 nit combs were sold to parents of school children. A further 200 were ordered from the United Kingdom.

About the end of the year, 2,000 nailbrushes were ordered from the United Kingdom for use by children *at school.*

An average of 6—10 will be sent to each school when these arrive.

(f) The Nutrition and Health Assistant

Besides her clerical work and work in schools in connection with Nutrition and the Milk Scheme, the Nutrition and Health Assistant helped the Nurses in the vision surveys.

She visited 122 schools and weighed and measured 6,047 pupils. She gave 42 talks to pupils and 11 talks and demonstrations to mothers at Social Welfare Centres. She also took 21 milk samples for analysis by the Government Chemist to assess their nutritional qualities.

119.—*(a) The Milk Scheme.*—The change over from full cream to skimmed milk came into force at the beginning of the School Year, and the daily issue of two yeast tablets with the milk ration was stopped. The pupils now receive 23 grams of skimmed milk flavoured with half gram of cocoa and 10 grams of raw sugar instead of the 20 grams full cream milk and two yeast tablets. Yeast is now given in worthwhile doses: 8—12 tablets of half gram each daily, on medical recommendation.

Halibut oil capsules B.P.C. (4,500 units Vit. A. and 450 units Vit. D. per capsule) are provided daily to pupils recommended by the Medical Officer. They are mostly pupils who are contacts of pulmonary tuberculosis in the family, or who show evidence of Vitamin A deficiency, or whose general condition warrants it.

A survey carried out about the middle of the year showed that 98·2 per cent of the pupils as compared with 96·4 per cent last year were taking the daily ration of milk.

3,545 pupils were on a double ration of milk and 8 yeast tablets daily.

120. *Experimental Work.*—An experiment with Cytacon tablets (Vitamin B_{12}) was carried out at Belle Rose R.C. school and at Plaisance C.E. school with the orphans attending these schools.

The object of the experiment was to determine if this Vitamin had any value as a growth promoting factor. It has been completed and a detailed report is in preparation.

Dental Work

121.—*(a) Treatment.*—The schoolchildren obtained treatment at the Civil Hospital, Victoria Hospital and through the Mobile Dental Clinic from the three Government Dentists.

At the Civil Hospital the dentist gave treatment to some 3,900 pupils.

At the Victoria Hospital, the dentist treated 2,048 pupils and the Mobile Dental Clinic visited the schools in the rural areas and treated 1,057 pupils.

(b) Propaganda.—Teeth cleaning drills were held regularly in schools and demonstrations were given by the Government Dentist in charge of the Mobile Dental Clinic.

1,776 toothbrushes were sold during the year. About the end of the year an order was placed in the United Kingdom for 6,000 toothbrushes as the present stock is nearing exhaustion.

A survey of 56,137 pupils showed that 85·5 per cent had toothbrushes as compared with 78 per cent last year.

122. *Public Health Work.*

(a) Vaccination against smallpox:—

47·5 per cent of the entrants at the Government Secondary schools were found to have no vaccination marks against smallpox.

Among the Training College entrants (1954 and 1955) the overall percentage was 23·2.

During the year 21 secondary school pupils and 30 Training College Students were vaccinated by the School Medical Officer.

(b) Tuberculosis Work.

(i) *Detection.*—114 pupils who are contacts of pulmonary tuberculosis in the family have so far been encountered in the primary schools. These cases are notified by the Tuberculosis Officer, the nursing or teaching staff or by members of the Tuberculosis Societies of Port Louis and Rose Hill. They are kept under close supervision.

6 pupils suffering from early pulmonary tuberculosis were removed from school.

(ii) *B.C.G. Campaign.*—The Tuberculosis Officer and his staff tested the 1954 entrants to the Teachers' Training College. The negative reactors were offered vaccination and the majority accepted.

In the Primary Schools during the year, 855 visits were paid by the staff of the B.C.G. Campaign: 14,028 pupils were tested, 8,076 pupils were vaccinated, 4,252 pupils were re-tested, and 15,309 dressings were applied.

(iii) *Among Teaching Staff.*—All " Short Course " Students (1954) who finished their course about the middle of the year had a tuberculin test or X-ray photograph of chest or were vaccinated before being sent to a primary school.

At the end of the year all the other students who had completed their course and were going to be posted to a school next school-year had an X-ray photograph of chest. Two cases of pulmonary tuberculosis were detected out of 62 examined.

From now on any new teacher recruited is required to have an X-ray photograph of chest to exclude pulmonary tuberculosis before being sent to a school.

(c) Whooping Cough Vaccination.—The School Health Service Staff and the Teaching Staff were asked to cooperate with the Health Department in the campaign which started about the beginning of the year.

123. *Health Education.*

(a) In Schools.—The nurses during their cleanliness and health surveys carried out a considerable amount of quiet, effective health teaching of both teachers and schoolchildren throughout the year. The emphasis was on the personal hygiene of the pupils.

The Service continued to receive useful publications from the Central Council of Health Education in the United Kingdom for use in health education work.

The monthly " Better Health " was sent regularly to every school.

About the end of the year, complimentary copies of " Family Doctor ", a monthly journal published by the British Medical Association, were received and one was sent to every school through the Area Superintendents. Head-teachers have been advised to subscribe to it from their school fund or privately as it is a very useful journal which imparts simple expert opinion on health matters.

A syllabus on Health Education for use by the teaching staff in the primary schools is nearing completion.

(b) At the Teachers' Training College.—The School Medical Officer took over the teaching of hygiene at the beginning of the school year. Arrangements have been made to bring in lecturers who are specialists in their own fields to come to the Training College and address the students on such important topics as tuberculosis, ill effects of alcohol, anaemia, posture, poliomyelitis, public health, dental hygiene, etc.

In cooperation with the local branches of the British Red Cross Society and the St. John Ambulance Association lectures in first aid as part of the " Hygiene " course are also given. The " Hygiene " course will be re-styled " Health Education " as from next year.

124. The Colony gratefully accepted a gift of 480 tons of full cream unsweetened condensed milk from the United Kingdom Ministry of Food for issue to school children.

In concluding this chapter, I should like to express the hope that it will be possible to fill at least one of the two vacant posts of School Medical Officers in the course of the year 1955. Throughout the year under review, a heavy burden has been falling on the only School Medical Officer available and he and the auxiliary staff posted under him have acquitted themselves, in a creditable manner, of duties which I consider very important for the building up of a healthier environment in Mauritius.

PART V

MATERNITY AND CHILD WELFARE

125. The activities of the Maternity and Child Welfare Society were as listed below: —

Confinements	2,281
Attendances of women at consultations ...	4,561
Attendances of infants at consultations ...	6,965
Attendances of infants at centres for weighing and supervision	17,040
Visits to infants	1,846
Average number of infants receiving milk daily	966
Average number of litres of milk distributed daily	508

126. The Superintendent of Midwives, to whom is entrusted the supervision of persons practising midwifery, the Assistant Superintendent and the Principal Matron continued to hold regular ante-natal clinics at various centres and the total number of expectant mothers in attendance was 1,286.

127. The District Midwifery Service, based on the Civil Hospital, has functioned satisfactorily and has served as in the past year to relieve pressure on hospital beds in the Maternity Block. The number of confinements conducted in the district by the midwives was 800 whilst at the same time 1,164 confinements were conducted in the Maternity of Civil Hospital. The combined figures represent 50·5 per cent of the total number of births for the town, a very appreciable figure when it is realised that the district service is confined to an area within a radius of one mile from the hospital.

Ante-natal visits numbered 775 and post-natal visits 9,467. In addition, the attendances at the ante-natal clinic reached the important figure of 7,107, 2,467 expectant mothers receiving attention.

128. The Mobile Ante-Natal Clinic is becoming increasingly popular as evidenced by the numerous requests which are received for additional places to be included in its itinerary. During the year it visited at regular intervals 76 outlying villages and hamlets and 2,203 new cases were seen. Re-attendances were 3,134.

129. Sixty-seven midwives are employed by the Department, twenty-two of whom are seconded to the Maternity and Child Welfare Society, while three are stationed in the Dependency of Rodrigues. The Midwives working directly under Officers of the Department made 15,754 visits and attended to 1,389 confinements.

130. There were six pupil midwives in training at Victoria and Civil Hospitals during the year ; all qualified in 1954.

PART VI

Prisons

131.—*(a) Prison Population.*—The total number of prisoners admitted during the year was 1,716 and the daily average population was 519.20, (including 89·47 at Borstal Institution).

(b) Prevalence of sickness.—The total number of cases registered was 5,929, and out of this number 315 were admitted into hospital. The in-patients include 43 cases from the Borstal Institution transferred to Beau Bassin Prison Hospital for treatment:—

2 cases were transferred to Civil Hospital.

9 cases were transferred to Victoria Hospital.

1 case was transferred to Floreal Hospital.

2 cases were transferred to Mental Hospital.

1 case attended Mental Hospital for examination by the Lunacy Board.

16 eye cases were seen by the Ophthalmologist at Victoria Hospital.

22 cases were seen by the Orthopaedic Surgeon at Floreal and Victoria Hospitals.

3 cases attended Floreal Hospital for about two or three months for physiotherapy.

34 cases attended Victoria Hospital for X-Ray examination.

4 cases attended Victoria Hospital for examination by the Genito-urinary Specialist.

4 cases attended the Central Laboratory for blood count.

20 surgical cases attended Victoria Hospital.

The daily average of sick treated outdoor was 15·10.

The daily average of patients in hospital was 9·86.

The sick rate % calculated on the daily average in hospital was 3·13.

(c) Veneral Diseases.—The number of cases was 37 out of which 15 were suffering from secondary syphilis and 6 from tertiary syphilis, 2 from soft chancre and 14 others from gonorrhoea and its complications.

(d) Admissions :—

TABLES SHOWING MONTHLY ADMISSIONS IN HOSPITAL

January	27	July	16
February	29	August	26
March	30	September	24
April	55	October	17
May	22	November	23
June	19	December	27

Total stay and average stay per patient for the year compared with previous years: —

Year	*Total stay in days*	*Average stay per patient*
1950	10,414	18·57
1951	8,367	19·32
1952	4,232	17·13
1953	3,469	12·89
1954	3,306	10·83

MONTHLY ADMISSIONS IN HOSPITAL FOR THE COMMON DISEASES

	January	*February*	*March*	*April*	*May*	*June*	*July*	*August*	*September*	*October*	*November*	*December*
Influenza	5	8	2	39	3	3	4	5	6	2	3	12
Anaemia	—	1	1	—	—	1	—	—	—	1	1	—
Dysentery	2	1	5	1	5	1	1	—	1	3	—	—
Diarrhoea and enteritis ...	2	2	2	1	3	1	—	3	1	—	5	1
Ankylostomiasis	1	—	—	—	—	—	—	1	—	—	—	—

(e) Deaths.—There was 1 death amongst prisoners, the cause being congestive heart failure. A post mortem examination was made and a judicial enquiry was held.

(f) Scabies.—The number of prisoners seen with scabies during the year was 92.

All these prisoners had already caught the disease when they were admitted into the prison.

(g) Malaria.—No case of malaria was noted.

(h) General remarks.—The prevailing diseases were influenza, diarrhoea and enteritis and dyspepsia.

On the whole, the health conditions were good. As usual all prisoners were inoculated with prophylactic T.A.B. vaccine on their admission to the Prison.

PART VII

The Dependencies of Mauritius

I. RODRIGUES

132. *Hospitals.*—There are three hospitals in Rodrigues. The main one at Port Mathurin has 40 beds. It has an operating theatre which is equipped for major surgery and also a Dental Unit. The two others are small cottage hospitals sited at Mont Lubin and La Ferme respectively and between them they provide a total of 30 beds. During the year a maternity ward was under construction at La Ferme.

The following table indicates the work performed in the three hospitals:—

Out-patients	34,552
Admissions to hospital	2,003
Operations performed	439

13 deaths at Port Mathurin Hospital, 1 at Mont Lubin Hospital and 6 at La Ferme Hospital.

133. *Dental Work.*—A Government Dental Surgeon from Mauritius visited Rodrigues between the 26th November, 1954 and the 11th December, 1954 and attended to 199 cases. He also made a brief survey of dental disease among the children of the three schools of the Dependency. On the other hand, the Medical Officer extracted 889 teeth.

134. *Maternal and Infant Welfare.*—718 ante--natal examinations were carried out and 193 confinements conducted by members of the Department's Staff. Ignorance is still rife among the population which remains suspicious of modern facilities. In a sense this is a blessing as it leaves the way open to the establishment of a sound preventive outlook, but in the meantime, far too many confinements are carried out at home by the unqualified " *dahines*." From these deliveries one infant with tetanus neonatorum and two infants with ophthalmia neonatorum were subsequently admitted to hospital. It is fortunate that the three cases were discharged completely cured.

Free milk is made available by the Public Assistance Department, but its issue needs to be carefully supervised by the medical staff as there is a tendency on the part of the mothers to deprecate breast-feeding.

135. *Public Health.*—A Senior Sanitary Inspector is posted at the Dependency and his activities are concentrated around the main village, Port Mathurin, while flying visits are paid occasionally to other parts of the island.

The night soil and scavenging (including weeding of streets) services have been re-organised and a higher standard of work is now being obtained.

A cremation ground has been opened at La Pointe Monnier and the first cremation in the history of Rodrigues took place on the 19th September.

On the 1st November, the new market—slaughter-house was opened.

The following animals were slaughtered during the year:—

Bullocks	10
Bulls	28
Cows	17
Heifers	33
Calves...	3

In only two instances were partial seizures effected on account of limited tuberculosis. During the rainy season, culicines continued to abound: oiling was once more beneficial in and around the main village. There is no malaria in Rodrigues and anopheles are to all evidence unknown. It is proposed to carry out a survey of the mosquito population as soon as the services of the Entomologist can be spared in Mauritius.

One case of diphtheria occurred during the year. 747 infants were inoculated against whooping cough and 694 vaccinations against smallpox were performed.

136. *Miscellaneous.*—13 patients were sent to Mauritius for examination and treatment.

Her Majesty's Prison was periodically visited and all prisoners are medically examined on admission and on discharge.

The Medical Officer reports that illegitimacy is on the increase.

II. The Chagos Archipelago and Agalega

137. The health programme established as a result of the two visits paid by His Excellency the Governor and the Director of Medical Services to those outlying islands continues to be implemented. The Sanitary Inspector temporarily posted to the Chagos has been withdrawn on completion of his work there and arrangements have been made for him to provide guidance at Agalega in the course of 1955.

ACKNOWLEDGEMENT

138. As I come to the end of yet another annual report, it is my duty once again to record that the Department succeeded in meeting the need for greater, wider, and more varied public health activity and in maintaining a very satisfactory standard of health in spite of the shortage of staff, inadequate accommodation and other difficult circumstances.

The results achieved are in no small measure due to the loyal and active co-operation of the members of the staff and paticularly to the devotion of the many professionals, technicians, auxiliaries and clerks who never hesitated to work longer hours when the interests of the community so required.

The co-operation of the public either individually or through the medium of local authorities, corporate bodies and voluntary organizations has been essential in the realisation of the Department's aims.

A complete yearly report on the activities of such a large organization as the Medical and Health Department cannot be produced without the assistance of collaborators, who once more helped to their utmost. The share of the assistance received from the Registrar of Health Statistics in the preparation of the voluminous statistical material contained in this report is gratefully acknowledged.

I take this opportunity to express my heartfelt thanks to all.

Finally I wish to record my appreciation of the understanding shown by the Liaison Officer for Health of the numerous and varied problems of the Department.

R. Lavoipierre,
3rd October, 1955. *Director of Medical Services.*

APPENDIX I

Annual Report of the Central Health Laboratory for the Year 1954

The work of the laboratory is divided up into the following sections:—

I. Medical Biology.
II. Pathology.
III. Bacteriology.
IV. Haemotology.
V. Serology.
VI. Bio-chemistry.
VII. Veterinary.

I. MEDICAL BIOLOGY

A. 7,877 Simple Routine Examinations were made

(a) Blood (Microscopical)

Films for malaria:—	
No parasites found	10
Films for microfilariae:—	
Wuchereria Bancrofti	13
No microfilariae	76
Total number examined	99

(b) Faeces (Microscopical)

Total number examined	4,055
Helminths:—	
Hymenolepsis nana	1
Taenia saginata	1
Heterodera marioni ova	2
Enterobius vermicularis ova	6
Trichuris ova	1,957
Ascaris ova	1,516
"Hookworm" ova	2,175
Strongyloides larvae	138
Strongylus ova	1
Bertiella studeri	1
Protozoa:—	
Entamoeba histolytica	49
Entamoeba coli	212
Vegetative and precystic amoebae	68
Endolimax nana	162
Giardia lamblia	118
Chilomastix mesnili	27
Trichomonas intestinalis	57
Blastocystis hominis	441
No helminths, no protozoa	697

(c) Urine (Microscopical)

Total number examined	2,274
Hyaline casts	163
Granular casts	212
Waxy casts	18
Leucocytic casts	24
Cellular casts	30
Red blood cells casts	3
Trichomonas vaginalis	40
Schistosoma haematobium	1

(d) Urine for Pregnancy Test

Total number examined	1,185
Positive-male toad test	455

(e) Cerebro-Spinal Fluid

Total number examined	268
Leucocyte count	256
Differential leucocyte count	12

II. PATHOLOGY

Biopsy and morbid histological examinations were made on 270 specimens of material.

Head and Neck:—

Scalp:—	
Granuloma	1
Sarcoma	1
Eye:—	
Meibomian cyst	1
Melanoma	1
Jaw:—	
Epulis	1
Fibrous tissue	1
Mouth:—	
Chronic stomatitis	1
Epithelioma of soft palate	1
Epithelioma of gum	1
Chronic inflammation of epiglottis	1
Tongue:—	
Papilloma	1
Face:—	
Rodent ulcer	2
Salivary gland:—	
Mixed parotid tumour	4

Nose:—	
Melanoma	1
Neck:—	
Adipose tissue of neck	1
Cystic hygroma	1
Foreign body in trachea	1
Thyroid:—	
Tolic goitre	2
Adenoma	4
Cystadenoma	2
Adenocarcinoma	2
Mandible:—	
Adamantinoma	1
Giant cell sarcoma	1
Pharynx:—	
Squamous Carcinoma	1
Thorax:—	
Breast:—	
Adipose tissue	1
Chronic abscess	1
Chronic mastitis	5
Necrotic carcinoma	2
Adenocarcinoma	4
Encephaloid carcinoma	8
Scirrhous carcinoma	8
Intraduct carcinoma	1
Fibroadenoma	1
Chest wall:—	
Haemangioma	1
Lung:—	
Anaplastic carcinoma	1
Heart:—	
Fatty degeneration	1
Abdomen:—	
Abdominal wall:—	
Lipoma	2
Neuroma	2
Stomach:—	
Scirrhous carcinoma	2
Adenocarcinoma	1
Gastric ulcer	6

Intestine:—	
Colitis	1
Tuberculosis of caecum	1
Chronic inflammation of caecum	2
Rectal polypus	1
Adenocarcinoma of rectum	1
Appendix:—	
Normal appendix	1
Chronic appendicitis	4
Bilharzial appendicitis	1
Iliac fossa:—	
Benign cyst	1
Gall bladder:—	
Chronic cholecystitis	1
Spleen:—	
Perisplenitis	1
Fatty degeneration	1
Liver:—	
Fatty degeneration	1
Cirrhosis	1
Kidney:—	
Fatty degeneration	1
Urinary bladder:—	
Papilloma	1
Ischio-rectal fossa:—	
Chordoma	1
Uterus :—	
Curettings:—	
Normal	10
Endometritis	1
Endometrial hyperplasia	8
Adenocarcinoma	1
Chorio epithelioma	1
Hydatidiform mole	2
Cervix:—	
Chronic cervicitis	15
Bilharziasis	2
Polypus	1
Adenocarcinoma	1
Squamous Carcinoma	5

Vagina:—	
Squamous carcinoma	2
Penis:—	
Squamous carcinoma	3
Spermatic cord:—	
Abscess	1
Prostate:—	
Abscess	1
Testes:—	
Abscess	1
Seminoma	1
Teratoma	1
Ovary:—	
Normal	1
Chocolate cyst	2
Adenocarcinoma	1
Papillary cystadenoma	2
Fallopian Tube:—	
Chronic salpingitis	1
Lymph Glands:—	
Chronic adenitis	13
Tuberculous adenitis	3
Hodgkin's disease	1
Lymphosarcoma	3
Secondary carcinoma	4
Bones and Joints:—	
Exostosis	1
Chondroma	1
Spindle cell sarcoma	1
Osteoma	1
Osteogenic sarcoma	3
Secondary carcinoma of bone marrow	1
Chronic osteomyelitis	5
Chronic synovitis	12
Chronic bursitis	1
Cyst of meniscus	1

Limbs:—	
Glomous tumour of finger	1
Foreign body in thigh	1
Chronic abscess of knee	1
Simple cyst of hand	1
Fibroma of hand	1
Benign cyst of knee	1
Endothelioma of foot	1
Skin:—	
Hypertrophied epithelium	1
No leprosy	1
Tuberculous abscess	1
Fibroma	1
Epithelioma	3
Rodent ulcer	1
Lipoma	1
Benign cyst	1
Chronic abscess	5
Calcified cyst	1
Nerve:—	
Neurofibroma	3
Blood Vessels:—	
Aneurysm	1
Arteriosclerosis	2
Buerger's disease	3
Miscellaneous:—	
Liposarcoma	1
Desmoid tumour	2
Haemangioma	2
Paravertebral abscess	1
Congenital arterio-venous fistula	1
Blood clot	2
Vegetable matter in urine	1
Muscular tissue	1
Pleural fluid:—	
No neoplastic cell	6
Ascitic fluid:—	
No neoplastic cell	2
Horse stomach:—	
Chronic abscess	1
TOTAL	270

III. BACTERIOLOGY

A. Direct Microscopical Examinations

1,328 microscopical examinations were made:—

(a) *Blood*

Total number examined	1

(b) *Sputum*

Total number examined	897
Mycobacter tuberculosis	141

(c) *Urine*

Total number examined	42
Mycobacter tuberculosis	6
Trichomonas	1

(d) *Cerebro-spinal fluid*

Total number examined	38
Mycobacter tuberculosis	1

(e) *Throat and nasal swabbings*

Total number examined	90
Corynebact. diphtheriae	19

(f) *Pus, discharges and scrapings, etc.*

Total number examined	261
Neisseria gonorrhoea	25
Mycobacter tuberculosis	9

B. Cultures

3,409 examinations were made:—

(a) *Blood*

Total number cultured	55
Bact. coli typical	1
Bact. faecalis alkaligenes	1
Pseudomonas pyocyanea	4
Bact. subtilis	2
Staphylococcus albus	1

(b) *Faeces*

Total number cultured	172
Bact. coli atypical	5
Morgan's bacillus	2

(c) *Urine*

Total number cultured	632
Bact. coli typical	158
Bact. coli atypical	29
Bact. coli anaerogenes	1
Bact. paracolon	2
Bact. faecalis alkaligenes	3
Morgan's bacillus	28
Pseudomonas pyocyanea	10
Bact. proteus	5
Bact. subtiis	11
Bact. Friedlanderi	1
Staphylococcus albus	8
Staphylococcus aureus	22
Streptococcus viridans	19
Streptococcus haemolyticus	2
Streptococcus non haemolyticus	2
Diphtheroids	1
Mycobacter tuberculosis	6
Inoculation to gunea pig	3
Inoculation to mice	1

(d) *Sputum*

Total number cultured	35
Mycobacter tuberculosis	10
Pneumococci	1
Strepto viridans	1
Inoculation to gunea pig	3

(e) *Cerebro-spinal fluid*

Total number cultured	111
Bact. subtilis	2
Pneumococcus	2

(f) *Throat and nasal swabbings*

Total number cultured	1,089
Corynebact. diphtheriae	157
Bact. Proteus	1
Streptococcus viridans	6
Streptococcus haemolyticus	28
Streptococcus albus	3
Staphylococcus aureus	8
Diphtheroids	42
Monilia species	13

(g) *Pus, discharges and scrapings, etc.*

Total number cultured	1,285
Bact. coli typical	9
Bact. coli atypical	1
Bact. coli anaerogenes	1
Morgan's bacillus	2
Morax Axenfeldt bacillus	1
Bact. proteus	3
Doderlein's bacillus	6
Pneumococcus	2
Streptococcus viridans	4
Streptococcus haemolyticus	5
Staphylococcus aureus	71
Staphylococcus citreus	15
Staphylococcus albus	536
Diphtheroids	122
Kock-Weeks bacillus	1
Mycobacter tuberculosis	13

(h) *Miscellaneous*

Water cultured	5
Milk cultured	4
Oysters cultured	4

(II) *Sensitivity tests to antibiotics :*

Streptococcus non haemolyticus	1
Streptococcus viridans	2
Staphylococcus aureus	1

C. AUTOGENOUS VACCINES WERE PREPARED FROM THE FOLLOWING ORGANISMS ISOLATED FROM VARIOUS SAMPLES, 8 IN ALL.

(a) *Pus, discharges and scrapings, etc.*

Staphylococcus aureus	8
D. WATER ANALYSES	408
E. MILK ANALYSES	5

IV. HAEMATOLOGY

Total number examined	3,929
Full counts of red and white cells and haemoglobin determinations	907
Differential leucocyte counts	451
Blood grouping (A.B.O.)	1,789
R.H. Factor (Positive)	184
R.H. Factor (Negative)	16
Clotting and bleeding times	144
Blood sedimentation rate	316
Blood platelets	3
Reticulocyte count	95
Fragility test	4
Bone marrow count	10

V. SEROLOGY

AGGLUTINATION TESTS:—

Total number of sera submitted for agglutination test ...	597
Significant agglutinins for Bact. Typhosum " H " Antigen	207
Significant agglutinins for Bact. Typhosum " O " Antigen	108
Significant agglutinins for Para Typhi A " H " Antigen ...	30
Significant agglutinins for Para Typhi B " H " Antigen ...	27
Significant agglutinins for Bact. Proteus O × K ...	6
Significant agglutinins for Bact. Proteus O × 2 ...	25
Significant agglutinins for Bact. Proteus O × 19 ...	20
Unsuitable for test	4

(a) Blood

Kahn tests:—

Negative	15,12
Doubtful reactions	42
+ + + + ...	99
+ + + ...	366
+ + ...	621
+	514
Unsuitable for test	32
TOTAL ...	15,126

(b) Cerebro-spinal fluid

Negative	21
Doubtful reactions	4
+	2
+ + ...	3
+ + + ...	4
+ + + + ...	3
TOTAL ...	37

(c) Blood

Kline tests:—

Negative	12,864
Doubtful reactions	317
+	488
+ + ...	618
+ + + ...	347
+ + + + ...	165
Unsuitable for test	327
TOTAL ...	15,126

(d) Blood

Wassermann reactions:—

Negative	718
Doubtful reactions	97
+	88
+ +	139
+ + +	133
+ + + +	236
TOTAL	1,411

(e) Cerebro-spinal fluid

(i) Wassermann reactions:—

Negative	59
Doubtful reactions	16
+	5
+ +	4
+ + +	9
+ + + +	8
Unsuitable for test	4
TOTAL	105

(ii) Lange colloidal gold test	63

(f) Gonorrhoea complement fixation test

Negative	13
+	2
+ +	2
Unsuitable for test	3
TOTAL	20

(g) Blood

Paul Bunnell's Test	7

MISCELLANEOUS

(a) Cerebro-spinalfluid

Nonne Apelt test for globulin	1

(b) Miscellaneous

Ascitic fluid for cells	2
Pus for amoeba	2
Hydrocephalus fluid for cells	1
Sperm for spermatozoa	1
Hydronephrotic fluid for cells	1
Smear for spirochaetes	1
Skin scraping for fungus	1
Scrapings for treponema pallidum	2
Flakes of epidermis for ringworm	1
Nail scraping for fungus	1

VI. BIOCHEMISTRY

(a) Urine

Total number examined	2,558
Albumen—qualitative	1,200
Albumen—quantitative	30
Glucose—qualitative	1,200
Glucose—quantitative	71
Acetone	19
Bile pigments	17
Bile salts	3
Specific gravity	3
Urea	5
Calculi	2
Bence Jones protein	2
Urobilinogen	5
Diastase	1

(b) Blood

Total number examined	3,688
Urea	1,749
Glucose	1,826
Chlorides	19
Total proteins	14
Albumen	8
Globulin	7
Uric Acid	5
Cholesterol	4
Calcium	19
Inorganic phosphates	3
Van Den Bergh Reaction	15
Bilirubin	15
Alkaline phosphate	3
Acid phosphatase	1

(c) *Cerebro spinal fluid*

Total number examined	687
Protein	268
Chlorides	211
Glucose	208

(d) *Faeces*

Total number examined	12
Bile	1
Fat	2
Occult blood	9

(e) *Miscellaneous*

(i) Fractional test meal	2
(ii) Ascitic fluid:	
Protein	5
Chlorides	3
Glucose	2
Urea	3

(iii) Pancreatic fluild:	
Enzymes	1
(iv) Pleural fluid:	
Protein	3
Glucose	3
Chlorides	3
(v) Peritoneal fluid:	
Urea	1
(vi) Fluid from cyst:	
Cholesterol crystals	1
Total	27

VII. VETERINARY

A. 61 microscopical examinations were made

(a) *Blood (microscopical)*

Total number examined	2

(b) *Blood (biochemical)*

Total number examined	4

(c) *Discharges, scrapings, etc (micr.)*

(i) Skin scrapings (cattle):	
Demodex bovis	1
Skin scrapings (stag):	
Sarcoptes scabiei	1
(ii) Milk for mastitis (penicillin treated)—	
No microorganisms	1
(iii) Dog for leptospirosis:	
No leptospirosis	1
(iv) Chickens—Newcastle disease, etc.:	
Newcastle diseases	31
Coccidiosis	2
(v) Goat for mastitis:	
Staphylococcus	1
(vi) Fresh water fishes from Mare-aux-Vacoas (2 Dames Céré and 10 Bluegills):	
No pathogen found	12
From La Ferme Reservoir (Dame Céré):	
No pathogen found	5

B. 13 Cultural examinations were made

(a) Blood

Total number cultured	1

(b) Discharges, etc.

Total number cultured	22
Bact. Coli atypical	12
Morgans Bacillus	10

AGGLUTINATION TESTS

Total sera submitted for agglutination test	192
Significant agglutinins for Brucella Abortus	65

FLOREAL HOSPITAL

Medical Biology

(a) Haematology

Total number examined	1,105
Total counts of red and white cells and haemoglobin determination	395
Differential leucocyte count	49
Blood grouping	147
Rhesus factor positive	1
Blood sedimentation rate	513

EXAMINATION OF BLOOD SMEARS FOR MALARIA BY THE INSECT BORNE DISEASES DIVISION

Total number examined	36,997
Positive	372

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Total number examined	16,538

I. MEDICAL BIOLOGY

7,115 simple routine examinations were made

(a) Blood (microscopical)

Total number examined	47
Films for malaria parasites:—	
No parasites found	24
Films for microfilariae:—	
Wuchereriae Bancrofti	6
No microfilariae	17

(b) Faeces (microscopical)

Total number examined	4,473
Helminths:—	
Enterobius vermicularis ova	1
Heterodera marioni	1
Strongyloides larvae	7
Trichuris ova	901
Ascaris ova	1,176
"Hookworm" ova	596

Protozoa:—

Entamoeba histolytica	37
Entamoeba Coli	65
Vegetative and precystic amoebae	29
Chilomastix mesnili	6
Giardia intestinalis	104
Trichomonas intestinalis	29
Circomonas	1
Blastocystis hominis	666
No helminths, no protozoa	855

(c) Urine (microscopical)

Total number examined	2,595
Hyaline casts	623
Granular casts	504
Waxy casts	21
Leucocytic casts	180
Cellular casts	18
Red Blood Cells casts	10
Schistosoma haematobium	491
Trichomonas vaginalis	165
Microfilariae	1

II. BACTERIOLOGY

2,279 microscopical examinations were made

(a) Sputum (microscopical)

Total number examined	1,830
Mycobacter tuberculosis	420

(b) Urine (microscopical)

Total number examined	7

(c) Throat and nasal swabbings (microscopical)

Total number examined	107
Corynebact. diphtheriae	7
Diphtheroids	1

(d) Pus, discharges and scrapings, etc. (microscopical)

Total number examined	335
Neisseria gonorrhoeae	78
Mycobacter tuberculosis	3

III. HAEMATOLOGY

Total number examined	3,361
Total counts of red and white:	
Cells and haemoglobin determinations	1,999
Differential leucocyte counts	408
Blood grouping	610
Blood sedimentation rate	320
Coagulation and bleeding time	24

IV. BIOCHEMICAL

(a) Faeces

Test for occult blood	1
Test for bile	1

(b) Fractional test meal

Total number examined	44

(c) Urine

Total number examined	3,737
Qualitative tests for determination of bile	32
Qualitative tests for determination of acetone	60
Glucose qualitative estimations	1,759
Glucose quantitative estimations	58
Albumen qualitative estimations	1,772
Albumen quantitative estimations	28
Specific gravity	28

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Total number examined	15,588

I. MEDICAL BIOLOGY

8,307 simple routine examinations were made

(a) Blood (microscopical)

Total number examined	84
Films for malaria parasites:—	
No parasites found	32
Films for microfilariae:—	
Wuchereria Bancrofti	2
No microfilariae	50

(b) Faeces (microscopical)

Total number examined	5,965
Helminths:—	
Enterobius vermicularis ova	2
Trichostrongyle ova	2
Strongyloides larvae	2
Trichuris ova	1,977
Ascaris ova	1,498
" Hookworm " ova	1,184
Heterodera marioni	4
Protozoa:—	
Entamoeba histolytica	2
Entamoeba coli	29
Vegetative and precystic amoebae	16
Chilomastix mesnili	1
Endolimax nana	44
Giardia intestinalis	33
Trichomonas intestinalis	17
Blastocystis hominis	971
No helminths, no protozoa	183

(c) Urine (microscopical)

Total number examined	2,258
Hyaline casts	563
Granular casts	348
Leucocytic casts	136
Cellular casts	14
Waxy casts	8
Schistosoma haematobium	64
Trichomonas vaginalis	151
Microfilariae	69

II. BACTERIOLOGY

820 microscopical examinations were made—

(a) Urine (microscopical)

Total number examined	2

(b) Sputum (microscopical)

Total number examined	731
Mycobacter tuberculosis	149

(c) Throat and nasal swabbings (microscopical)

Total number examined	45
Diphtheroids	4

(d) Pus, discharges, scrapings, etc. (microscopical)

Total number examined	78
Neisseria gonorrhoeae	8

(e) Miscellaneous

Gastric juice	3

III. HAEMOTOLOGY

Total number examined	4,558
Total of red and white cells and haemoglobin determinations	2,677
Differential leucocyte counts	759
Blood grouping	619
Blood sedimentation rate	481
Bleeding and coagulation times	19
Blood platelets	3

IV. BIOCHEMICAL

(a) Urine

Total number examined	1,903
Glucose—qualitative estimation	834
Glucose—quantitative estimation	11
Albumen—qualitative estimation	896
Albumen—quantitative estimation	4
Qualitative tests for determination of bile	64
Qualitative tests for determination of acetone	94

APPENDIX II

Report of Government Chemist for 1954

The bio-chemical analyses were transferred in January to the Bacteriological Division. The Government Chemist continued to sit as a member of the Liquor Licensing Board. A system of reference cards, giving details of articles of particular interest appearing in the technical journals, was put into operation at the beginning of the year and has already been of value on many occasions.

General Chemical Analyses

During the year 3,044 exhibits were examined, involving 6,967 samples compared with 1,822 exhibits and 7.704 samples in 1953. There was thus a considerable increase in exhibits received, mainly due to increases in the number of cases of adulteration of milk and edible oil and of cases of drunkenness, and this has placed a considerable strain on the division. The drop in the number of samples received is more than accounted for by the increase in the number of empty petrol drums examined for presence of gas.

Table 1 shows details of the numbers of exhibits and samples examined during the year.

TABLE 1

DETAILS OF EXHIBITS AND SAMPLES EXAMINED IN 1954

Description	*Exhibits*	*Samples*
Gandia	48	131
Opium	11	71
Rum	464	601
Wash	3	4
Wine	7	14
Power alcohol	59	59
Pharmaceutical drugs ...	42	42
Textiles	33	56
Bread	6	6
Edible oil	269	269
Waters	53	53
Milk	1,309	1,309
Foodstuffs	9	56
Insecticides	151	151
Gas tests	11	3,527
Inflammable substances ...	11	11
Poisoning cases—human	66	75
Poisoning cases—animal	6	15
Drunkenness	465	465
Miscellaneous	21	32
TOTAL ...	3,044	6,967

The distribution of the samples examined, according to their source, is shown in Table 2, from which it is seen that the bulk of the work is for Government Departments, with a small proportion carried out for H.M. Forces and private firms and individuals.

TABLE 2

Distribution of Samples

Section	*Medical and Health*	*Police*	*Customs and Excise*	*Other Govt. Depts.*	*H.M. Forces and private firms*
Gandia	—	131	—	—	—
Opium	—	71	—	—	—
Rum	—	295	306	—	—
Wash	—	4	—	—	—
Wine	—	13	1	—	—
Power alcohol	—	—	59	—	—
Pharmaceutical drugs ...	—	—	42	—	—
Textiles	—	—	56	—	—
Bread	—	—	—	6	—
Edible oil	269	—	—	—	—
Waters	1	—	—	52	—
Milk	1,276	—	—	20	13
Foodstuffs	7	—	—	—	49
Insecticides	151	—	—	—	—
Gas tests	—	—	—	—	3,527
Inflammable substances ...	—	11	—	—	—
Poisoning cases—human	54	21	—	—	—
Poisoning cases—animal	—	15	—	—	—
Drunkenness	447	18	—	—	—
Miscellaneous	10	16	2	2	1

Edible Oil

Sampling and analyses of all edible oils imported into the Colony was recommended early in the year and a total of 269 consignments, compared with only 19 for 1953, were examined and reported upon as satisfactory.

Milk

From the results of the analyses made during the year under review, it would appear that there is a slight improvement in the quality of the milk sold to the public. The special milk unit, instituted in December, 1953, continued throughout 1954 and submitted 705 samples out of a total of 1,309 received for examination. This total is practically double that received during 1953 and has placed a heavy burden on the division.

Comparison of the percentage adulteration of fresh milk with the two previous years is given in Table 3.

TABLE 3

COMPARISON OF ADULTERATION OF MILK FOR PERIOD 1952–54

	1952	*1953*	*1954*
Complying with Regulations	19	9	16
Containing less than 5 per cent added water ...	15	17	23
Containing 5 per cent or more added water ...	62	66	55
Deprived of fat	23	21	15
Containing cane sugar	26	27	20

In many cases, the samples failed to comply with the regulations in more than one respect.

On several occasions, the Government Chemist has been called upon to give evidence in Court in connection with milk contraventions and also to carry out joint analyses with private chemists.

During the year, a series of experiments was commenced to follow the changes in the sugar content of milk on storage. This became necessary following differences in the cane sugar content of milk when re-analysed after periods of 2–3 months. The investigation has not yet been completed but the results so far obtained show that the cane sugar content can disappear within a few weeks although this is not always the case.

Work has also been commenced on the presence of salt added as an adulterant to milk in place of the more popular cane sugar but so far very little evidence has been obtained that this practice is being carried out.

The analysis of reconstituted dried milk, supplied to the school children, has been continued for the Education Department and a total of 20 samples were analysed.

WATERS

The usual monthly analyses of water from La Marie and Pailles supplies were continued and as from November monthly analyses were also instituted in respect of water from the new Piton du Milieu reservoir. At the request of the Director of Public Works, " pH " determination for the water from both La Marie and Piton du Milieu reservoirs was also made.

Following complaints made on the taste of chlorine in La Marie supply, the Government Chemist was asked to investigate this problem and regular checks are now made.

Analyses were also carried out on the water in La Ferme reservoir following the death of large numbers of fish but no obnoxious substance could be found.

A sample of spring water at Baie du Cap was also examined.

DENATURED SPIRITS

No samples were received during the year but the Government Chemist was asked to advise on the method of denaturation as complaints had been received respecting the objectionable odour of the denaturated spirits. As a result new regulations were published.

Poisoning Cases—Human

Investigations were carried out in 66 cases of poisoning, or suspected poisoning and the most common poison is phenol as can be seen from the following table:—

Phenol	23	Sodium hydroxide ...	1
Iodine	2	Alcohol	3
Petrol	1	Barbiturate...	3
Petroleum	2	Mepacrine hydrochloride	1
Cyanide	1	Sodium chloride	1
Acetic acid	3	Laquer...	1
Sulphuric acid	2	Negative	22

Drunkenness

During the year the Kozelka and Hine method for determination of alcohol in body fluids, as recommended by the British Medical Association of the Society for Analytical Chemistry, was introduced into the Laboratory with the result that far more reliable results were obtained. The immediate effect was that far more samples were submitted by the hospitals.

Bread

There was a marked fall in the number of samples submitted for analysis, only 6 being received as compared with 114 in 1953.

Foodstuffs

There was a heavy increase compared with the previous year. This was entirely due to H.M. Forces receiving some old stock, a high proportion of which had to be condemned as unfit for consumption.

Insecticides

This was the first full spraying season following the transfer of the chemical section of the Insect Borne Diseases Division and a a total of 151 test papers were examined for D.D.T.

Gas Tests

A total on 3,525 empty petrol drums were examined, and a visit was made to the *Sir Jules* in dry dock to examine the two fuel oil tanks prior to repairs being carried out.

Customs Laboratory

Supervision of the Customs Laboratory in Port Louis was continued throughout the year. The total number of samples received were 15,722 consisting of:—

Wine—imported	239
Spirits and liquors—imported ...	127
Local country liquor (wine)	15,004
Vinegar —local	85
Vinegar—imported	3
Textiles	218
Flavouring essences	42
Miscellaneous	4
TOTAL ...	15,722

APPENDIX III

Report of Entomology Research Unit

DISSECTIONS

Female *A. gambiae* and *A. coustani* were dissected for salivary gland and stomach infections. Two slight stomach infections were found. It seems probable that the number of *gambiae* infected with the malarial parasite is now so small, that it would necessitate a considerable number of dissections to detect the odd *gambiae* that is infected. A few thousand dissections per year are useless:—

	No. dissected	*Sporozoites*	*Oocysts*
A. gambiae Giles	3,006	Nil	2
A. coustani Laveran ...	95	Nil	Nil

LONGEVITY

The average longevity of female gambiae under laboratory conditions has been found to be 12.3. ± 0.28 days, with a range of 7–26 days. The mosquitoes were provided with blood meals to satiation.

HOST PREFERENCES

Stomach smears of blood gorged *gambiae* were sent to the Lister Institute of Preventive Medicine for precipitin testing by Dr. B. Weitz. The results to date are:—

	+ve Man	*+Cattle*	*Negative*
Caught in houses... ...	6	5	1
Caught in cowsheds ...	35	1,154	51

Mixed feeds man/cattle (cowsheds) = 8

It may be of interest to add here the results of the precipitin tests conducted by Dr. Weitz on stomach smears from the other two Mauritian anophelines. All mosquitoes were caught in cowsheds:—

	+ve Man	*+Cattle*	*Negative*
A. coustani Laveran ...	31	151	27
A. *maculipalpis* Giles ...	2	8	1

Similar results from stomach smears obtained from *Culex pipiens fatigans* Wd., found resting in cowsheds were:—

	+ ve *Man*	+ ve *Cattle*	*Negative*
Culex pipiens fatigans Wd. ...	84	6	23

It is of interest to note the large proportion of *fatigans,* which after feeding on man, choose to rest in cowsheds.

An intensive search of the Petite Rivière—Albion area during the summer months, showed resting gambiae to be confined to cowsheds and rock crevices. During the summer months there was very heavy breeding of *gambiae* in this area. No adults were found resting in houses. It is not to be inferred however, that *gambiae* do not enter houses, only that they do not rest in houses to complete their gonotrophic cycle.

It was again found that, in general, gambiae are confined to areas below the 1,000 feet contour.

Further work again showed that gambiae were more active during the evening hours than during the later hours of the night. This crepuscular activity *(sensu lat.)*, has been noticed in Reunion, and according to Bernet (Med. Trop. *10* p. 56, 1950) also occurs in the West African island of Goree. Perhaps it is a phenomenon that is associated with climatic conditions of small islands. It is thought that in Mauritius, the rising humidity of the night air restricts the flight activity of *gambiae* during the later night hours. The medical interest lies in the fact that the people are out of doors, concerned with their various and varied social activities at the peak hours of *gambiae* activity. There is then a suggestion of exophagy.

To determine if *gambiae* required more than one blood meal to develop eggs, female *gambiae* were individually fed on various animals. They were offered further blood meals 24 and 48 hours after the initial feed. The following results were obtained:—

Feeding on man. ... ... 1,000 female *gambiae*.
78·0 per cent developed eggs after the initial feed.
Feeding on cattle. ... ... 200 female *gambiae*.
62·0 per cent developed eggs after the initial feed.
Feeding on deer. ... ... 250 female *gambiae*.
48·7 per cent developed eggs after the initial feed.

There would then appear to be a trend for *gambiae* to require more than one blood meal to develop eggs, when feeding on animals other than man.

It should be emphasised that in Mauritius there exists a game reservoir of about 10,000 deer, plus monkeys and wild pigs. These may act as a deviation factor or as a maintenance factor for *gambiae*, when breeding away from habitations. Reunion, the sister island, lacks entirely this wild game reservoir. Again the sister island lacks the close contact of cowshed and house, which is a feature of village life in Mauritius. The cowsheds in Reunion, more properly *l'abri*, are shade shelters, they are not the walled and roofed cowsheds of Mauritius. From the brief visit which the Entomologist paid to Reunion in November, 1954, it would appear that the deviation of *gambiae* away from man is considerably higher in Mauritius than in Reunion. It is only a deviation for *gambiae* is very much a facultive feeder ; if other animals outweigh man, *gambiae* in Mauritius will disregard man. This is borne out by the fact that at places such as Pointe D'Esny and Fort George where cattle are exceedingly few compared to man, *gambiae* will turn to man.

EGGS BATCHES

The average egg batch of *gambiae* when fed on various animals did vary according to the host animal, viz.

Man	140±5·4	eggs/female
Deer	123±9·4	do.
Cow	111±9·4	do.
Guinea-pig	105±8·9	do.
Rabbit	100±9·6	do.

Further the egg batch of wild caught female *gambiae* showed seasonal differences and variations between the egg batches of the 1st and 2nd gonotrophic cycles.

	Egg batch of 1st cycle	*Egg batch of 2nd cycle*
Winter (April–Sept.) ...	96·1±5·61	74·75±4·01
Summer (Oct.–March) ...	114·7±8·82	91·4 ±3·5

The first gonotrophic cycle was found to be:—

	Winter	*Summer*
Blood fed	7·84±0·11 hours	7·85±0·03 hours
Half gravid ...	23·23±0·16 hours	39·15±0·05 hours
Gravid	66·00±4·24 hours	46·42±0·65 hours
	97·07 hours	93·42 hours

The second gonotrophic cycle was completed within 75.2 ± 0.12 hours.

Gonotrophic dissociation/gonotrophic concordance does not occur in the Mauritian *gambiae*.

A gonotrophic cycle is here defined, for the purposes of this work only, as the time interval elapsing between partaking of a blood meal and the commencement of eviposition. It does not include the unfed stage. This is a deliberate omission, as the unfed stage does vary within wide time limits. Some individual mosquitoes feed shortly after emergence, others not until 24 hours after emergence.

LIFE CYCLES

Observed life cycles of *gambiae* in the laboratory, during the latter half of the year have shown the following results:—

	INSTAR						
	1st	*2nd*	*3rd*	*4th*	*Pupa*	*Total*	*Temperature*
July	4·2 days	4·2	3·6	1·6	1·6	15·2	27·0° C
August ...	4·7 ,,	3·7	3·1	1·4	1·4	14·3	28·5° C
September ...	4·0 ,,	3·6	1·8	1·5	1·1	12·0	29·8° C
October ...	5·0 ,,	3·2	1·8	1·4	1·0	12·4	30·4° C
November ...	3·4 ,,	2·5	2·1	1·5	1·3	10·8	32·1° C
December ...	3·2 ,,	2·4	1·9	1·5	1·1	10·1	33·5° C

Temperature refers to the average monthly temperature of the breeding water taken at noon.

In general it was found that the males emerge some 12 hours before the females of the same egg batch. Further results are awaited. It was also found that the duration of the egg stage during the winter was 36.07 ± 1.31 hours, and during the summer was 50.01 ± 12.4 hours.

RESISTANCE TO SUBMERSION

Fourth instar larvae were totally deprived of the water/air interface. Only the larvae of *gambiae* showed immediate distress:—

	Time of death	
Anopheles gambiae Giles	1–3 hours	
Culex fatigans Wd.	2–3 hours	
Aedes albopictus (Skuse)	5–6 hours	Tree hole breeders.
Orthopodomyia arboricollis d'Emm ...	5–6 hours	

RESISTANCE TO SALINITY

Detailed results will be found in the final report of the Research Unit, but it has been found that the eggs of *gambiae* will hatch in waters of molar concentration of NaCl. Pupae are likewise resistant and are also resistant to water heavily charged with copper sulphate and other chemicals.

The larvae on the other hand are unable to survive in waters charged with more than 17.5 grams NaCl per litre, i.e., 50 per cent sea-water. The larvae of the salt water *gambiae* can withstand pure sea water, but not molar concentrations of NaCl. The same holds true for the larvae of *Culex fatigans*. It is proposed at a suitable date to raise the salt water gambiae of Mauritius (and of the Mascarenes) to sub-specific rank.

ISLANDS

Due to the courtesy of the Fishery Officer, the Entomologist visited Ilot Morne ; *Culex fatigans, Culex tritaeniorhyncus* and *Culex Poicilipes* were found breeding in the two wells that are to be found on the islet. By kind permission of the Commander Mauritius Naval Volunteer Force, the Entomologist visited Round Island ; no collections of water were to be found.

TABLE I

TABLE INDICATING PROGRESSION OF CERTAIN DEPARTMENTAL ACTIVITIES

	1925	*1930*	*1935*	*1940*	*1945*	*1950*	*1951*	*1952*	*1953*	*1954*
Number of in-patients	19,810	26,773	27,908	28,073	27,321	28,303	30,747	31,206	31,909	31,048
Number of out-patients .—										
(i) At static dispensaries (cases)	Not published	157,642	190,460	255,295	225,074	254,055	225,837	224,312	248,049	265,264
At static dispensaries (attendances) ...	do	189,656	270,726	378,588	293,621	303,549	362,946	379,476	399,899	402,136
(ii) Thro ' mobile dispensaries	—	—	—	—	—	46,653	107,214	137,035	111,849	118,912
Total number of surgical operations	3,334	6,017	7,509	10,129	8,377	14,680	16,206	22,244	27,380	30,365
No. of cases dealt with in X-Ray Department	—	—	1,668	Not published		8,780	12,726	14,034	16,372	19,798
No. of examinations made at the Central Laboratory	5,167	14,199	9,269	Not published	20,522	33,249	43,490	45,422	54,341	65,060
No. of patients seen at Orthopaedic clinics out-patient section	—	—	—	—	—	6,203	4,212	6,504	8,556	8,807
No. of orthopaedic cases treated surgically ...	—	—	—	—	—	2,257	1,439	3,684	3,824	4,456

TABLE II

REPORT ON HOSPITALS (Calendar Year 1954)

Hospital	*Patients remaining on 31.12.53*	*Total admissions*	*Deaths*	*Patients remaining on 31.12.54*	*Number of beds*	*Number of patients on any date during period under review*		*Medical cases*	*Surgical cases*	*Number of operations performed on*	
						Maximum	*Minimum*			*In-patients*	*Out-patients*
Civil	216	8,172	414	244	410	403	228	4,830	3,322	2,533	5,048
Long Mountain	15	1,905	26	19	65	70	9	1,732	173	47	157
Poudre d'Or	8	1,986	27	10	70	76	5	1,482	504	269	342
Flacq	30	2,492	65	32	92	108	29	2,170	322	75	1,369
Mahébourg...	28	2,878	98	59	105	118	28	2,207	671	209	1,706
Souillac	43	2,450	41	45	91	96	40	2,254	196	196	1,104
Moka	19	1,849	55	25	80	82	23	1,123	726	412	830
Victoria	159	7,793	327	193	263	300	159	5,031	2,762	2,185	8,003
Mental	46	509	39	20	64*	75	21	494	15	346	—
Industrial School	5	175	—	5	16	16	2	89	86	5	5
Beau-Bassin Prisons ...	8	310	1	11	30	19	4	212	98	7	363
Floréal	142	527	15	174	223†	219	128	189	338	1,531	3,623
Leper	46	2	1	41	62	46	41	2	—	—	—
TOTAL ...	765	31,048	1,109	878	1,571	1,628	717	21,815	9,233	7,815	22,550

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* Infirmary only. The Mental Hospital has a total bed strength of 693.

† Hospital for poliomyelitis and orthopaedic cases.

TABLE III

Nature of Operations	*Number performed*
1. *Stomach and duodenum*:—	
(*a*) Closure of perforation	26
(*b*) Gastro-enterostomy	48
(*c*) Gastrectomy	46
(*d*) Others	6
2. *Intestines*:—	
(*a*) Closure of wounds anl perforations	10
(*b*) Resection and/or anastomosis	15
(*c*) Reduction of volvulus	3
(*d*) Reduction of intussusception	10
(*e*) Division of adhesions or bands	1
(*f*) For any other cause of obstruction	6
(*g*) Formation or closure of artificial anus	4
(*h*) Appendicectomy	458
(*i*) Drainage of peritoneal abscesses	2
(*j*) Omentopexy	—
(*k*) Exploratory laparatomy	33
(*l*) Others	20
3. *Rectum and anus*:—	
(*a*) Excision of rectum	1
(*b*) Tratment of prolapse	17
(*c*) For fissure and fistula	58
(*d*) For ischio-rectal abscess	18
(*e*) Ligature of haemorroids	112
(*f*) Injection of haemorroids	13
(*g*) Sigmoidoscopy	14
(*h*) Others	59
4. *Hernia*:—	
(*a*) Inguinal	173
(*b*) Femoral	4
(*c*) Umbilical	11
(*d*) Others	19
5. *Liver, spleen and pancreas*:—	
(*a*) Upon liver	2
(*b*) Cholecystectomy	4
(*c*) Other operations upon gall bladder	2
(*d*) Splenectomy	2
(*e*) For pancreatitis	1
(*f*) Others	4
6. *Urinary system*:—	
(*a*) Nephrotomy	Nil
(*b*) Nephrectomy	5
(*c*) Perinephric explorations	2
(*d*) Upon ureters	13
(*c*) Cystotomy and supra pubic drainage	30
(*f*) Prostatectomy	7
(*g*) Urethrotomy	8
(*h*) For urethral fistula and abscess	1
(*i*) Cystoscopy and ureteric catheterization	39
(*j*) Urethral catheterization and passage of sounds	173
(*k*) Others	38
7. *Male Organs of Generation*:—	
(*a*) Circumcision	69
(*b*) Others for paraphimosis	93
(*c*) Amputation of penis	2
(*d*) Hydrocelotomy	105
(*e*) For varicocele	2
(*f*) Upon testis and epididymis	9
(*g*) Others	34

TABLE III—*continued*

Nature of Operations	*Number performed*
8. *Female organs of generation*:—	
(*a*) Ovariotomy	8
(*b*) Salpingotomy	8
(*c*) Salpingostomy for sterility	4
(*d*) Myomectomy	Nil
(*e*) Hysterectomy	81
(*f*) Hysteropexy	14
(*g*) Caesarian section	40
(*h*) Uterine suture	2
(*i*) For extra-uterine gestation	12
(*j*) Drainage of pelvic abscess	2
(*k*) Instrumental delivery and destruction of foetus	24
(*l*) For vesico-or-recto-vaginal fistula:—	
(i) Plastic repair	6
(ii) Uretero-colic anastomosis	9
(*m*) Colporrhaphy and perineorrhaphy	20
(*n*) Removal of uterine contents and/or dilatation and curettage	218
(*o*) Induction of labour or abortion	Nil
(*p*) Insufflation of fallopian tubes	Nil
(*q*) Uterine drainage	Nil
(*r*) Examination and/or manipulation of uterus or foetus	3
(*s*) Upon cervix	111
(*t*) Others	72
9. *Eye*:—	
(*a*) For entropion	5
(*b*) For cataract	284
(*c*) For glaucoma	6
(*d*) Iridectomy	34
(*e*) Enucleation and evisceration	19
(*f*) Others	533
10. *Ear, nose and throat*:—	
(*a*) Myringotomy	Nil
(*b*) Mastoidotomy	4
(*c*) Removal of foreign bodies	96
(*d*) Reduction of nasal fracture	Nil
(*e*) Resection of septum	8
(*f*) Turbinectomy and/or drainage of sinuses	15
(*g*) Removal of tumours	55
(*h*) Tonsillotomy, by guillotine	408
(*i*) Tonsillectomy, by dissection (both including removal of adenoids)	68
(*j*) For quinzy	3
(*k*) Uvulotomy	Nil
(*l*) Laryngoscopy, bronchoscopy and oesophagoscopy	1
(*m*) Others	455
11. *Mouth and neck*:—	
(*a*) Extraction of teeth	8,415
(*b*) Upon jaws (including treatment of fractures)	12
(*c*) Upon tongue and lips (including removal of tumours but excluding plastic)	14
(*d*) Excision or treatment of glands in neck	3
(*e*) Tracheotomy	9
(*f*) Thyroidectomy (including ligature of thyroid vessels)	9
(*g*) For thyri-glossal cysts	2
(*h*) Others	16

TABLE III—*continued*

Nature of Operations	*Number performed*
12. *Chest*:—	
(a) Thoracotomy and pleural drainage	Nil
(b) Lobectomy	Nil
(c) Upon cardia	Nil
(d) Phrenic avulsion	21
(e) Artificial pneumothorax	2,264
(f) Paracentesis	91
(g) Others	9
13. *Mammary Glands*:—	
(a) Mastectomy	17
(b) Excision of tumour	10
(c) Incision of abscess	164
14. *Cranium*:—	
(a) Decompression and treatment of fracture and haemorrhage	17
(b) For intracranial tumour	1
(c) Drainage of intracranial abscess	Nil
(d) Others	2
15. *Spinal column*:—	
(a) Laminectomy	5
(b) Bone graft	31
(c) Manipulation and/or external fixation (for tuberculosis, fracture and other conditions, including application of plaster jacket)	252
(d) Lumbar and cisternal puncture	144
(e) Spinal injection	4
(f) Others	57
16. *Bones*:—	
(a) For fractures:	
(i) Open operations (including bone graft, application of plates and other mechanical aids)	175
(ii) Manual and instrumental reduction and/or application of splints and plaster	1,451
(b) For osteomyelitis, osteitis and periostitis:—	
(i) Acute	4
(ii) Chronic (including sequestrectomy and/or application of plaster)	21
(c) Removal of tumours	6
(d) Others	630
17. *Joints*:—	
(a) Arthrotomy:—	
(i) For sepsis	14
(ii) For removal of loose or foreign bodies	56
(b) Excision of joint	14
(c) Reduction of dislocation	119
(d) Manipulation for other purposes	83
(e) External fixation (including application of plaster)	27
(f) Aspiration	17
(g) Others	35
18. *Amputations*:—	
(a) Of fingers	32
(b) Of hand and forearm	2
(c) Of arm	Nil
(d) Of toes	22
(e) Of foot and leg	31
(f) Of thigh	8
(g) Others	6

TABLE III—*continued*

Nature of Operations	*Number performed*
19. *Arteries, veins and nerves*:—	
(*a*) For aneurysm	3
(*b*) Ligature of vessels	16
(*c*) For angioma	1
(*d*) Injection of varicose veins	110
(*e*) Nerve suture and neurolysis	9
(*f*) Others upon nerves (including stretching and injection)	27
(*g*) Others	226
20. *Orthopaedic and Plastic Operations*:—	
(*a*) Osteotomy (for deformities)	18
(*b*) Other treatment of deformities and contractures (including manipulation and application of splints and plaster)	1,019
(*c*) For hare lip and cleft palate	27
(*d*) Upon ears, nose and lips	2
(*e*) For elephantiasis	20
(*f*) Skin graft	85
(*g*) Others	27
21. *Conditions unclassified regionally*:—	
(*a*) For ulcers (excluding skin graft)	2
(*b*) For other septic conditions (including incision of abscesses and whitlows)	3,808
(*c*) Suture and treatment of wounds (including tendon suture)	2,712
(*d*) Excision of superficial tumours (including cysts)	173
(*e*) Extraction of foreign bodies	263
(*f*) Removal of glands	72
(*g*) For bursitis and ganglion	4
(*h*) Treatment of burns	5
(*i*) Removal of parasites	10
(*j*) Others	537

TABLE V

STATISTICS OF MORBIDITY AND MORTALITY CALENDAR YEAR 1954

	Intermediate List Cause Groups	*Detailed List Numbers*	*Static dispensaries and out-patient depts of hospitals*			*Hospitals—(In patients)*						*Mobile Dispensaries*
			New cases			*Male patients*		*Female patients*				
			Male	*Female*	*Total cases*	*New cases*	*deaths*	*New cases*	*deaths*	*Total cases*	*Total deaths*	**Attendances**
A	1. Tuberculosis of respiratory system ...	001–008	80	64	124	209	20	178	11	387	31	—
A	2. Tuberculosis of meninges and central nervous system	010	—	—	—	9	5	7	2	16	7	—
A	3. Tuberculosis of intestines, peritoneum and mesenteric glands	011	—	—	—	4	—	4	—	8	—	—
A	4. Tuberculosis of bones and joints ...	012,013	—	—	—	8	—	5	1	13	1	—
A	5. Tuberculosis, all other forms	014–019	9	7	16	9	1	10	—	19	1	—
A	6. Congenital syphilis	020	10	5	15	3	—	2	—	5	—	—
A	7. Early syphilis	021	62	57	119	8	—	4	—	12	—	10
A	8. Tabes dorsalis	024	—	—	—	—	—	—	—	—	—	—
A	9. General paralysis of insane	025	—	—	—	—	—	—	—	—	—	—
A	10. All other syphilis	026–029 022,023	191	187	378	55	1	51	—	106	1	60
A	11. Gonoccocal infections . .	030–035	88	6	94	16	—	1	—	17	—	—
A	12. Typhoid fever	040	—	—	—	43	3	24	4	67	7	—
A	13. Paratyphoid fever and other Salmonella iniections	041,042	—	—	—	—	—	2	—	2	—	—
A	14. Cholera	043	—	—	—	—	—	—	—	—	—	—
A	15. Brucellosis (undulant fever)	044	—	—	—	—	—	—	—	—	—	—
A	16.—(*a*) Bacillary dysentery	045	2	2	4	3	—	—	—	3	—	—
	(*b*) Amœbiasis	046	360	249	609	37	1	16	—	53	1	1
	(*c*) Other uuspecified forms of dysentery	047,048	1,264	1,268	2,532	96	—	20	1	116	1	1,843
A	17. Scarlet fever	050	—	—	—	—	—	—	—	—	—	—
A	18. Streptococcal sore throat...	051	4	1	5	3	—	—	—	3	—	—
A	19. Erysipelas	052	—	—	—	2	—	1	—	3	—	—
A	20. Septicæmia and pyæmia	053	—	—	—	1	—	1	1	2	1	—
A	21. Diphtheria	055	5	8	13	12	4	8	2	20	6	—
A	22. Whooping cough	056	75	82	157	2	—	4	—	6	—	57
A	23. Meningococcal infections	057	—	—	—	—	—	—	—	—	—	—
A	24. Plague	058	—	—	—	—	—	—	—	—	—	—
A	25. Leprosy	060	—	—	—	—	—	—	—	—	—	—
A	26. Tetanus	061	2	—	2	65	21	49	23	114	44	1

A	27. Anthrax	062	—	—	—	—	—	—	—	—	—	—
A	28. Acute poliomyelitis	080	—	—	—	7	—	4	1	11	1	—
A	29. Acute iufectious encephalitis	082	—	—	—	—	—	—	—	—	—	—
A	30. Late effects of acute poliomyelitis and acute infectious encephalitis	081,083	1	—	1	—	—	—	—	—	—	—
A	31. Smallpox	084	—	—	—	—	—	—	—	—	—	—
A	32. Measles	085	148	142	290	29	—	24	—	53	—	3
A	33. Yellow fever	091	—	—	—	—	—	—	—	—	—	—
A	34. Infectious hepatitis	092	71	56	127	22	—	13	3	35	3	9
A	35. Rabies	094	—	—	—	—	—	—	—	—	—	—
A	36.—(*a*) Louse-borne epidemic typhus ...	100	—	—	—	—	—	—	—	—	—	—
	(*b*) Flea-borne endemic typhus (murine)	101	—	—	—	—	—	—	—	—	—	—
	(*c*) Tickborne epidemic typhus	104	—	—	—	—	—	—	—	—	—	—
	(*d*) Mite-borne typhus	105	—	—	—	—	—	—	—	—	—	—
	(*e*) Other and unspecified typhus	102,103 106–108	—	—	—	—	—	1	—	1	—	—
A	37.—(*a*) Vivax malaria (benign tertian) ...	110	1	2	3	1	—	—	—	1	—	—
	(*b*) Malariæ malaria (quartan)	111	—	—	—	—	—	—	—	—	—	—
	(*c*) Falciparum malaria (malignant tertian)	112	3	4	7	1	—	—	—	1	—	—
	(*d*) Blackwater fever	115	1	—	1	—	—	—	—	—	—	—
	(*e*) Other and unspecified forms of malaria	113,114 116,117	1	—	1	—	—	1	—	1	—	—
A	38.—(*a*) Schistosomiasis vesical (S. hæmatobium)	123·0	347	95	442	32	—	22	—	54	—	—
	(*b*) (Schistosomiasis intestinal (S. Mansoni) ...	123·1	—	—	—	—	—	—	—	—	—	—
	(*c*) Schistosomiasis pulmonary (S. japonicum) ...	123·2	—	—	—	—	—	—	—	—	—	—
	(*d*) Other and unspecified Schistosomiasis	123·3	—	—	—	—	—	—	—	—	—	—
A	39. Hydatid disease	125	—	—	—	—	—	—	—	—	—	—
A	40.—(*a*) Onchocerciasis	127	—	—	—	—	—	—	—	—	—	—
	(*b*) Loiasis	—	—	—	—	—	—	—	—	—	—	—
	(*c*) Filariasis (bancrofti)	—	32	36	68	19	—	10	—	29	—	2
	(*d*) Other filariasis	—	—	—	—	—	—	—	—	—	—	—
A	41. Ankylostomiasis	129	3,872	6,035	9,907	161	—	211	—	372	—	6,136
A	42.—(*a*) Tapeworm (infestation) and other cestode infestations	126	2	1	3	3	—	1	—	4	—	—
	(*b*) Ascariasis	130·0	6,330	7,507	13,837	62	—	104	—	166	—	12,895
	(*c*) Guinea worm (dracunculosis) ...	130·3	16	19	35	—	—	—	—	—	—	—
	(*d*) Other diseases due to helminths	124, 128 130·1, 130·2	1,716	1,861	3,577	22	—	28	—	50	—	3,375

TABLE V—*continued*

	Intermediate List Cause Group	*Detailed List Numbers*	*Static dispensaries and out-patient depts of hospitals*			*Hospitals—(In patient)*						*Mobile Dispensaries*
			New cases			*Male patients*		*Female patients*				
			Male	*Female*	*Total cases*	*New cases*	*deaths*	*New cases*	*deaths*	*Total cases*	*Total deaths*	**Attendances**
A	43.—(*a*) Lymphogranuloma venereum ...	037	—	—	—	—	—	—	—	—	—	—
	(*b*) Granuloma inguinale, venereal ...	038	—	—	—	—	—	—	—	—	—	—
	(*c*) Other and unspecified veneral diseases	039	7	1	8	—	—	1	—	1	—	—
	(*d*) Food poisoning infection and intoxication	049	—	—	—	2	—	1	—	3	—	—
	(*e*) Relapsing fever	071	—	—	—	—	—	—	—	—	—	—
	(*f*) Leptospirosis icterohaemorrhagica (Weil's disease)	072	—	—	—	—	—	—	—	—	—	—
	(*g*) Yaws	073	—	—	—	—	—	—	—	—	—	—
	(*h*) Chickenpox	087	7	5	12	2	—	—	—	2	—	—
	(*i*) Dengue	090	—	—	—	—	—	—	—	—	—	—
	(*j*) Trachoma	095	—	—	—	—	—	—	—	—	—	—
	(*k*) Sandfly fever	096·7	—	—	—	—	—	—	—	—	—	—
	(*l*) Leishmaniasis	120	—	—	—	—	—	—	—	—	—	—
	(*m*) (i) Trypanosomiasis gambiensis ...	121	—	—	—	—	—	—	—	—	—	—
	(ii) Trypanosomiasis rhodesiensis ...	—	—	—	—	—	—	—	—	—	—	—
	(iii) Other and unspecified Trypanosomiasis	—	—	—	—	—	—	—	—	—	—	—
	(*n*) Dermatophytosis	131	37	11	48	1	—	1	—	2	—	—
	(*o*) Scabies	135	2,748	2,631	5,379	29	—	26	—	55	—	7,613
	(*p*) All other diseases classified as infective and parasitic	036, 054, 059, 063, 064, 070, 074, 086, 088, 089, 093, 096·1 –096·6, 096·8, 096·9, 122, 132–134 136–138	137	108	245	31	1	31	—	62	1	14
A	44. Malignant neoplasm of buccal cavity and pharynx	140–148	—	—	—	13	2	4	1	17	3	—
A	45. Malignant neoplasm of oesophagus ...	150	1	—	1	11	2	—	—	11	2	—
A	46. Malignant neoplasm of stomach	151	—	1	1	23	5	6	1	29	6	—

A	47. Malignant neoplasm of intestine, except-rectum	152, 153	—	—	—	1	—	2	—	3	—	—
A	48. Malignant neoplasm of rectum	154	—	—	—	13	4	3	—	16	4	—
A	49. Malignant neoplasm of larynx	161	—	—	—	1	1	—	—	1	1	—
A	50. Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	162, 163	—	—	—	10	2	—	—	10	2	—
A	51. Malignant neoplasm of breast	170	—	—	—	—	—	22	—	22	—	—
A	52. Malignant neoplasm of cervix uteri ...	171	—	1	1	—	—	103	6	103	6	—
A	53. Malignant neoplasm of other and unspecified parts of uterus	172–174	—	—	—	—	—	2	—	2	—	—
A	54. Malignant neoplasm of prostate	177	—	—	—	1	1	—	—	1	1	—
A	55. Malignant neoplasm of skin	190, 191	—	1	1	6	—	2	—	8	—	—
A	56. Malignant neoplasm of bone and connective tissue	196, 197	—	—	—	—	—	1	—	1	—	—
A	57. Malignant neoplasm of all other and unspecified sites	155–159, 160, 164, 165, 175, 176, 178–181, 192–195, 198, 199	—	—	—	19	2	24	2	43	4	—
A	58. Leukæmia and aleukæmia	204	—	—	—	3	—	3	1	6	1	—
A	59. Lymphosarcoma and other neoplasms of lymphatic and hæmatopoietic system	200–203, 205	2	1	3	8	1	2	—	10	1	—
A	60. Benign neoplasms and neoplasms of unspecified nature	210–239	50	49	99	29	1	142	2	171	3	9
A	61. Nontoxic goiter	250, 251	2	10	12	2	—	4	—	6	—	—
A	62. Thyrotoxicosis with or without goiter ...	252	—	1	1	3	—	5	—	8	—	—
A	63. Diabetes mellitus	260	95	173	268	80	6	148	8	228	14	3
A	64.—(*a*) Beriberi	280	1	1	2	—	—	—	—	—	—	—
	(*b*) Pellagra	281	94	315	409	44	—	66	—	110	—	1
	(*c*) Scurvy	282	—	1	1	1	—	1	—	2	—	6
	(*d*) (i) Kwashiorkor	283–286	—	—	—	—	—	—	—	—	—	—
	(ii) Other deficiency states	...	1,058	1,364	2,422	202	24	189	28	391	52	3,725
A	65.—(*a*) Pernicious and other hyperchromic anaemias	290	—	—	—	—	—	4	—	4	—	—
	(*b*) Iron deficiency anaemias (hypochromic)	291	137	266	403	1	—	—	—	1	—	—
	(*c*) Other specified and unspecified anaemias	292, 293	6,172	18,998	25,170	823	17	1,806	23	2,629	40	16,696

TABLE V—*continued*

	Intermediate List Cause Group	*Detailed List Numbers*	*Static dispensaries and out-patient depts of hospitals* — *New cases* — *Male*	*Female*	*Total cases*	*Hospitals—(In patients)* — *Male patients* — *New cases*	*deaths*	*Female patients* — *New cases*	*deaths*	*Total cases*	*Total deaths*	*Mobile Dispensaries* **Attendances**
A	66.—(*a*) Asthma	241	1,670	1,594	3,264	289	2	246	1	535	3	2,116
	(*b*) All other allergic disorders, endocrine, metabolic and blood diseases	240, 242–245 253, 254 270–277 287–289 294–299	195	304	499	21	1	15	1	36	2	269
A	67. Psychoses	300–309	2	1	3	203	—	119	—	322	—	—
A	68. Psychoneuroses and disorders of personality	310–324, 326	21	28	49	74	1	56	—	130	1	57
A	69. Mental deficiency...	325	9	7	16	11	—	11	—	22	—	6
A	70. Vascular lesions affecting central nervous system	330–334	51	15	66	136	34	65	20	201	54	—
A	71. Nonmeningococcal meningitis	340	—	—	—	24	11	14	7	38	18	—
A	72. Multiple sclerosis...	345	—	—	—	1	—	—	—	1	—	—
A	73. Epilepsy	353	124	85	209	62	2	21	1	83	3	83
A	74, Inflammatory diseases of eye	370–379	1,966	1,680	3,646	50	—	47	—	97	—	2,137
A	75. Cataract	385	167	217	384	122	—	234	—	356	—	—
A	76. Glaucoma	387	10	21	31	3	—	10	—	13	—	—
A	77.—(*a*, Otitis externa	390	590	588	1,178	5	—	2	—	7	—	1,970
	(*b*) Otitis media and mastoiditis ...	391–393	764	759	1,523	27	—	24	2	51	2	392
	(*c*) Other inflammatory diseases of ear	394	1,049	1,016	2,065	2	—	5	—	7	—	575
A	78.—(*a*) All other diseases and conditions of eye	380–384 386, 388 389	890	658	1,548	54	—	39	—	93	—	84
	(*b*) All other diseases of the nervous system and sense organs	341–344 350–352 354–357 360–369 395–398	1,621	2,092	3,713	173	7	75	2	248	9	2,658
A	79. Rheumatic fever	400–402	12	5	17	37	2	23	1	60	3	1
A	80. Chronic rheumatic heart disease ...	410–416	6	3	9	12	3	33	2	45	5	—

A	81. Arteriosclerotic and degenerative heart disease	420–422	55	28	83	137	31	80	25	217	56	2
A	82. Other diseases of heart	430–434	285	396	681	174	36	62	15	236	51	600
A	83. Hypertension with heart disease ...	440–443	66	117	183	4	1	2	—	6	1	49
A	84. Hypertension without mention of heart	444–447	431	565	996	66	2	46	1	112	3	175
A	85. Diseases of arteries	450–456	84	70	154	105	5	33	5	138	10	77
A	86. Other diseases of circulatory system ...	460–468	442	307	749	253	3	87	2	340	5	301
A	87. Acute upper respiratory infections ...	470–475	1,612	2,079	3,691	32	—	20	—	52	—	4,791
A	88. Inflenza	480–483	13,035	13,137	26,172	370	1	234	—	604	1	4,929
A	89. Lobar pneumonia	490	5	3	8	25	4	11	4	36	8	—
A	90. Bronchopneumonia	491	35	29	64	69	14	59	13	128	27	1
A	91. Primary atypical, other and unspecified pneumonia	492, 493	8	14	22	118	16	42	3	160	19	—
A	92. Acute bronchitis	500	1,012	936	1,948	27	2	18	—	45	2	283
A	93. Bronchitis, chronic and unqualified ...	501, 502	1,810	1,384	3,194	327	10	205	4	532	14	2,260
A	94, Hypertrophy of tonsils and adenoids ...	510	243	479	722	31	—	71	—	102	—	209
A	95. Empyema and abscess of iung ...	518, 521	6	1	7	5	1	5	1	10	2	—
A	96. Pleurisy	519	44	25	69	76	1	21	—	97	1	5
A	97.—(*a*) Pneumoconiosis	523	—	—	—	—	—	—	—	—	—	—
	(*b*) All other respiratory ...	511–517 520–522 524–527	576	598	1,174	69	4	30	4	99	8	779
A	98.—(*a*) Dental caries...	530	4,993	5,910	10,903	15	—	10	—	25	—	218
	(*b*) All other diseases of teeth and supporting structures	531–535	614	423	1,037	48	—	32	—	80	—	1,247
A	99. Ulcer of stomach	540	13	3	16	16	2	—	—	16	2	2
A	100. Ulcer of duodenum	541	137	28	165	227	12	20	1	247	13	10
A	101. Gastritis and duodenitis	543	754	1,359	2,113	77	—	64	—	141	—	2,356
A	102. Appendicitis	550–553	65	86	151	167	—	382	—	549	—	—
A	103. Intestinal obstruction and hernia ...	560, 561, 570	139	16	155	277	17	42	3	319	20	—
A	104.—(*a*) Gastro-enteritis and colitis, between 4 weeks and 2 years	571·0	1,945	1,856	3,801	67	15	68	20	135	35	546
	(*b*) Gastro-enteritis and colitis, ages 2 years and over	571·1	1,618	1,637	3,255	99	16	103	19	202	35	377
	(*c*) Chronic enteritis and ulcerative colitis	572	57	56	113	53	9	32	4	85	13	—
A	105. Cirrhosis of liver	581	11	4	15	26	3	18	3	44	6	—
A	106. Cholelithiasis and cholecystitis ...	584, 585	57	92	149	60	4	68	—	128	4	118
A	107. Other diseases of digestive system	536—539 542, 544, 545 573—580, 582 583, 586, 587	10,462	11,973	22,435	574	19	430	8	1,004	27	6,633

TABLE V—*continued*

	Intermediate List Cause Group	*Detailed List Numbers*	*Static dispensaries and out-patient depts of hospitals*			*Hospitals—(In patients)*						*Mobile Dispensaries* **Attendances**
			New cases		*Total cases*	*Male patients*		*Female patients*		*Total cases*	*Total deaths*	
			Male	*Female*		*New cases*	*deaths*	*New cases*	*deaths*			
A	108. Acute nephritis	590	44	28	72	11	—	12	1	23	1	18
A	109. Chronic, other and unspecified nephritis	591—594	139	164	303	109	18	112	9	221	27	233
A	110. Infections of kidney	600	45	85	130	13	—	52	—	65	—	—
A	111. Calculi of urinary system	602—604	2	5	7	37	1	10	—	47	1	2
A	112. Hyperplasia of prostate	610	1	—	1	13	—	—	—	13	—	—
A	113. Diseases of breast	620, 621	—	173	173	—	—	59	—	59	—	13
A	114.—(*a*) Hydrocele	613	106	—	106	122	—	—	—	122	—	1
	(*b*) Disorders of menstruation ...	634	—	2,169	2,169	—	—	226	—	226	—	475
	(*c*) All other diseases of the genito-urinary system	601, 603 605—609 611—612 614—617 622—633 635—637	976	2,108	3,084	281	4	365	4	646	8	410
A	115. Sepsis of pregnancy, childbirth and the puerperium	640, 641, 681 682, 684	—	12	12	—	—	4	—	4	—	40
A	116. Toxaemias of pregnancy and the puerperium	642, 652 685, 686	—	42	42	—	—	209	15	209	15	—
A	117. Haemorrhage of pregnancy and childbirth	643, 644 670—672	—	3	3	—	—	65	11	65	11	—
A	118. Abortion without mention of sepsis or toxaemia	650	—	204	204	—	—	438	1	438	1	15
A	119. Abortion with sepsis	651	—	—	—	—	—	17	—	17	—	—
A	120.—(*a*) Other complications of pregnancy, childbirth and the puerperium	645—649 673—680 683, 687—689	—	5,569	5,569	—	—	637	15	637	15	245
	(*b*) Delivery without complications ...	660	—	—	—	—	—	2,091	—	2,091	—	—
A	121. Infections of skin and subcutaneous tissue	690—698	7,933	5,559	13,492	577	1	285	—	862	1	2,471
A	122. Arthritis and spondylitis	720—725	300	419	719	67	—	40	—	107	—	177
A	123. Muscular rheumatism, and rheumatism, unspecified	726, 727	4,053	5,970	10,023	162	—	183	—	345	—	5,373

A 124. Otseomyelit disanperiostitis	730	13	11	24	29	—	7	—	36	—	1
A 125. Ankylosis and acquired musculoskeletal deformities	737 745—749	6	7	13	3	—	1	—	4	—	—
A 126.—(*a*) Chronic ulcer of skin (including tropical ulcer)	715	65	27	92	26	—	9	—	35	—	—
(*b*) All other diseases of skin... ...	700—714 716	2,165	2,289	4,454	113	—	89	—	202	—	2,034
(*c*) All other diseases of musculoskeletal system	731—736 738—744	210	154	364	67	—	20	--	87	—	43
A 127. Spina bifida and meningocele	751	—	--	—	2	1	11	3	13	4	—
A 128. Congenital malformations of circulatory system	754	—	—	—	1	1	2	1	3	2	—
A 129. All other congenital malformations	750, 752, 753 755—759	14	9	23	29	3	20	1	49	4	—
A 130. Birth injuries	760, 761	1	—	1	2	2	3	1	5	3	—
A 131. Postnatal asphyxia and atelectasis ...	762	—	—	—	22	17	9	7	31	24	—
A 132.—(*a*) Diarrhoea of new born (under 4 weeks)	764	26	25	51	1	1	1	1	2	2	440
(*b*) Ophthalmia neonatorum	765	—	—	—	3	—	—	—	3	—	—
(*c*) Other infections of newborn	763 766—768	32	22	54	2	—	4	1	6	1	—
A 133.—Haemolytic disease of newborn ...	770	—	—	—	1	1	—	—	1	1	—
A 134.—All other defined diseases of early infancy	769, 771, 772	10	10	20	11	3	28	7	39	10	201
A 135.—Ill-defined diseases peculiar to early infancy, and immaturity unqualified	773—776	10	12	22	71	52	62	47	133	99	—
A 136. Senility without mention of psychosis ...	794	60	118	178	42	4	66	1	108	5	41
A 137.—(*a*) Pyrexia of unknown origin	788.8	1,178	1,396	2,574	68	—	55	—	123	—	9,071
(*b*) Observation, without need for further medical care	793	354	44	398	98	—	207	—	305	—	—
(*c*) All other ill-defined causes of morbidity	780-787 788·1-788·7 788·9 789-792 795	6,324	9,204	15,528	913	43	718	26	1,631	69	8,001
SUB-TOTAL		99,179	130,153	229,332	10,099	568	12,856	445	22,955	1,013	118,053

TABLE V—*continued*

Intermediate List Cause Groups	*Detailed List Numbers*	*Static dispensaries and out-patient depts of hospitals*			*Hospitals—(In patients)*						*Mobile Dispensaries*
		New cases			*Male patients*		*Female patients*				
		Male	*Female*	*Total cases*	*New cases*	*deaths*	*New cases*	*deaths*	*Total cases*	*Total deaths*	**Attendances**
" E CODE " ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (EXTERNAL CAUSE)											
AE 138. Motor vehicle accidents...	E 810–E 835	301	105	406	258	19	53	3	311	22	—
AE 139. Other transport accidents ...	E 800–E 802 E 840–E 866	493	174	667	206	8	18	1	224	9	—
AE 140. Accidental poisoning	E 870–E 895	28	52	80	28	—	34	—	62	—	—
AE 141. Accidental falls	E 900–E 904	3,367	1,201	4,568	404	4	155	2	559	6	604
AE 142. Accident caused by machinery	E 912	41	1	42	16	—	1	—	17	—	—
AE 143. Accident caused by fire and explosion of combustible material	E 916	40	31	71	26	6	32	10	58	16	—
AE 144. Accident caused by hot substance, corrosive liquid, steam, and radiation	E 917, E 918	532	338	870	99	7	108	14	207	21	32
AE 145. Accident caused by firearm	E 919	1	—	1	10	1	—	—	10	1	—
AE 146. Accidental drowning and submersion ...	E 929	1	—	1	2	—	1	—	3	—	—
AE 147.—(*a*) Foreign body entering eye and adnexa	E 920	499	104	603	11	—	—	—	11	—	—
(*b*) Foreign body entering other orifice	E 923	146	120	266	3	—	2	—	5	—	—
(*c*) Accidents caused by bites and stings of venemous animals and insects ...	E 927	88	32	120	6	—	—	—	6	—	—
(*d*) Other accidents caused by animals	E 928	399	317	716	7	—	7	—	14	—	—
AE 147. (*e*) All other accidental causes	E 910–E 911 E 913–E 915 E 921–E 922 E 924–E 926 E 930–E 965	20,649	7,937	28,586	1,238	8	294	3	1,532	11	223
AE 148. Suicide and self-inflicted injury ...	E 970–E 979	19	9	28	57	5	46	2	103	7	—
AE 149. Homicide and injury purposely inflicted by other persons (not in war) ...	E 980–E 985	735	351	1,086	439	3	153	—	592	3	—
AE 150. Injury resulting from operations of war	E 990–E 999	—	—	—	—	—	—	—	—	—	—
TOTAL		126,518	140,925	267,443	12,909	629	13,760	480	26,669	1,109	118,912

"N CODE". ALTERNATIVE CLASSIFICATION OF ACCIDENTS, POISONINGS AND VIOLENCE (NATURE OF INJURY)

SUB-TOTAL to A 137 *brought forward* ...		99,179	130,153	229,332	10,099	568	12,856	445	22,946	1,013	118,053
AN 138. Fracture of skull	N 800–N 804	6	2	8	92	18	12	3	104	21	—
AN 139. Fracture of spine and trunk	N 805–N 809	80	25	105	106	7	16	1	122	8	—
AN 140. Fracture of limbs	N 810–N 829	609	293	902	374	3	125	3	499	6	12
AN 141. Dislocation without fracture	N 830–N 839	81	47	128	21	—	9	—	30	—	—
AN 142. Sprains and strains of joints and adjacent muscles	N 840–N 848	351	118	469	46	—	8	—	54	—	59
AN 143. Head injury (excluding fracture) ...	N 850–N 856	1,720	503	2,223	247	5	31	1	308	6	—
AN 144 Internal injury of chest, abdomen, and pelvis	N 860–N 869	3	3	6	9	5	2	—	11	5	—
AN 145. Laceration and open wounds	N 870–N 908	9,774	3,175	12,949	811	3	170	—	981	3	127
AN 146. Superficial injury, contusion and crushing with intact skin surface	N 910–N 929	13,394	5,926	19,320	750	—	233	—	983	—	612
AN 147. Effects of foreign body entering through orifice	N 930–N 936	645	224	869	10	—	3	—	13	—	—
AN 148. Burns	N 940–N 949	532	338	870	150	12	148	26	298	38	45
AN 149. Effects of poisons	N 960–N 979	35	53	88	75	4	73	1	148	5	—
AN 150 All other and unspecified effects of external causes	N 950–N 959 N 980–N 999	109	65	174	119	4	44	—	163	4	4
TOTAL		126,518	140,925	267,443	12,909	629	13,760	480	26,609	1,109	118,912

TABLE VI

MAIN CAUSES OF MORBIDITY

Disease	*In-patients of hospitals (1954)*	*Out-patients at hospitals and dispensaries (1954)*
Tuberculosis (all forms)	443	140
Syphilis and its sequelae	123	512
Dysentery (all forms)	172	3,145
Schistosomiasis vesical	54	442
Filariasis	29	68
Ankylostomiasis	372	9,907
Ascariasis	166	13,837
Scabies	55	5,379
Avitaminosis and other deficiency states ...	503	2,834
Anaemias	2,634	25,573
Asthma	535	3,264
Inflammatory disease of eye	97	3,646
Influenza	604	26,172
Pneumonias	324	94
Bronchitis	577	5,142
Diseases of teeth and supporting structures ...	105	11,940
Gastro-enteritis and colitis (between 4 weeks and 2 years)	135	3,801
Gastro-enteritis and colitis (between 2 years and over)	202	3,255
Complications of pregnancy, childbirth and the puerperium	1,370*	5,830
Infections of skin and subcutaneous tissue ...	1,862	13,492
Other diseases of skin and subcutaneous tissue	237	4,546
Muscular rheumatism and rheumatism unspecified	345	10,023
Accidents, poisonings and violence	3,714	38,111

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*Excluding 2,091 normal deliveries.

TABLE VII

HOSPITAL STATISTICS

(Corresponding to the 1948 International Classification)

Group	*Male*		*Female*		*Total*	
	cases	*deaths*	*cases*	*deaths*	*cases*	*deaths*
I ...	1,009	57	866	49	1,875	106
II ...	138	21	316	13	454	34
III ...	642	33	674	38	1,316	71
IV ...	824	17	1,810	23	2,634	40
V ...	288	1	186	1	474	1
VI ...	659	54	536	32	1,195	86
VII ...	788	83	366	51	1,154	134
VIII ...	1,149	53	716	29	1,865	82
IX ...	1,706	97	1,269	58	2,975	155
X ...	586	23	836	14	1,422	37
XI ...	—	—	3,461	42	3,461	42
XII ...	716	1	383	—	1,099	1
XIII ...	328	—	251	—	579	—
XIV ...	32	5	33	5	65	10
XV ...	113	76	107	64	220	140
XVI ...	1,121	47	1,046	27	2,167	74
XVII ...	2,810	61	904	35	3,714	96
TOTAL ...	12,909	629	13,760	480	26,669	1,109

GROUP I—Infective and parasitic diseases.
II—Neoplasms
III—Allergic, endocrine system, metabolic and nutritional diseases
IV—Diseases of the blood and blood-forming organs
V—Mental, psychoneurotic and personality disorders
VI—Diseases of the nervous system and sense organs
VII Diseases of the circulatory system
VIII—Diseases of the respiratory system
IX—Diseases of the digestive system
X—Diseases of the genito-urinary system
XI—Deliveries and complications of pregnancy, childbirth and the puerperium
XII—Diseases of the skin and cellular tissue
XIII—Diseases of the bones and organs of movement
XIV—Congenital malformations
XV—Certain diseases of early infancy.
XVI—Symptoms, senility and ill-defined conditions
XVII—Accidents, poisonings and violence.

TABLE VIII

DEATHS FROM PRINCIPAL CAUSES 1945–1954 (INTERNATIONAL LIST, 1938 REVISION)

Year	Group I	Group II	Group III	Group IV	Group V	Group VI	Group VII	Group VIII	Group IX	Group X
1945	4,898	53	178	894	2	402	234	1,538	2,283	566
1946	3,862	57	112	833	2	407	239	1,138	1,969	525
1947	2,366	76	111	577	4	339	206	893	1,026	300
1948	4,052	88	130	451	—	378	294	1,318	1,078	262
1949	1,603	121	127	470	—	365	381	831	1,085	286
1950	975	122	103	378	—	387	410	978	913	261
1951	863	103	134	483	1	437	399	1,072	1,335	272
1952	713	128	149	515	1	457	441	1,150	1,301	315
1953	980	139	176	504	6	515	559	1,323	1,269	340
1954	665	145	196	560	5	470	553	1,206	1,747	350

Year	Group XI	Group XII	Group XIII	Group XIV	Group XV	Group XVI	Group XVII	Group XVIII	Total Deaths
1945	266	85	7	5	1,427	583	239	1,617	15,277
1946	185	67	7	1	1,193	489	186	1,250	12,528
1947	106	47	3	6	1,129	381	172	938	8,680
1948	84	44	5	9	1,099	285	171	859	10,518
1949	83	23	6	5	842	226	189	741	7,384
1950	86	34	7	10	782	202	193	612	6,453
1951	78	28	8	14	793	248	197	743	7,208
1952	82	15	19	11	852	328	205	765	7,447
1953	69	22	38	9	803	357	209	981	8,299
1954	40	20	19	6	877	382	221	1,200	8,462

GROUP I—Infective and parasitic diseases
II—Cancer and other tumours
III—Rheumatism, diseases of nutrition and of endocrine glands, other general diseases and deficiency diseases
IV—Diseases of blood and blood-forming organs
V—Chronic poisoning and intoxication
VI—Diseases of the nervous system and sense organs
VII—Diseases of the circulatory system
VIII—Diseases of the respiratory system
IX—Diseases of the digestive system

GROUP X—Diseases of urinary and genital organs
XI—Diseases of pregnancy, childbirth and puerperal state
XII—Diseases of skin and cellular tissue
XIII—Diseases of bones and organs of movement
XIV—Congenital malformation
XV—Diseases peculiar to the first year of life
XVI—Senility, old age
XVII—Death from violence
XVIII—Ill-defined causes of death.

TABLE IX

NEW TUBERCULOUS CASES (NOTIFIED IN 1954)

Districts	*New cases notified (1954)*		*Deaths*	
	Living	*Notified after death*	*Already notified*	*Notified after death*
Port Louis	177	16	15	16
Pamplemousses	8	13	4	13
Rivière du Rempart ...	13	—	1	—
Flacq	17	3	3	3
Grand Port	18	4	2	4
Savane	7	2	—	2
Plaines Wilhems	68	30	10	30
Black River	—	1	—	1
Moka	7	1	—	1
TOTAL ...	315	70	35	70

The above notified cases are divided in population groups as follows :—

	Living Cases			*Deaths*		
	Male	*Female*	*Total*	*Male*	*Female*	*Total*
General	47	42	89	17	15	32
Hindu	76	61	137	25	27	52
Muslim	35	34	69	13	6	19
Chinese	15	5	20	1	1	2
TOTAL ...	173	142	315	54	51	105

TABLE X

Deaths classified into age (years) and Population Groups

	0–1		2–4		5–9		10–14		15–19		20–24		25–29		30–34		35–39		40–	
	M	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*	*M*	*F*
General	—	—	2	1	—	—	—	—	—	—	1	2	3	4	1	4	—	—	10	4
Hindu	—	2	1	2	—	2	2	—	1	1	2	5	2	3	5	3	2	2	10	7
Muslim	—	—	1	—	—	1	—	—	1	2	—	—	1	—	2	1	1	—	7	2
Chinese	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—
Others...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
TOTAL ...	—	2	4	3	—	3	2	—	2	4	3	7	6	7	8	8	3	2	28	13

TABLE XI

NOTIFIABLE CONTAGIOUS OR COMMUNICABLE DISEASES BY DISTRICTS—CALENDER YEAR 1954

District	*Typhoid fever*	*Diphtheria*	*Acute Poliomyelitis*	*Erysipelas*	*Puerperal fever*	*Tuberculosis*
Port Louis	14	10	2	1	—	177
Pamplemousses	6	2	2	—	—	8
Rivière du Rempart	12	2	2	—	—	13
Flacq	10	9	—	—	—	16
Grand Port	5	8	1	1	—	18
Savanne	11	1	—	—	—	7
Plaines Wilhems	17	33	3	1	2	67
Black River	7	1	—	—	—	—
Moka	6	3	1	—	—	7
TOTALS	88	69	11	3	2	313

TABLE XII

MONTHLY NOTIFICATIONS OF NOTIFIABLE CONTAGIOUS OR COMMUNICABLE DISEASES—CALENDAR YEAR 1954.

Month	*Typhoid fever*	*Diphtheria*	*Acute-Poliomyelitis*	*Erysipelas*	*Puerperal fever*	*Tuberculosis*
January	11	3	1	1	—	29
February	7	4	—	—	—	46
March	9	5	1	—	1	22
April	18	4	5	—	—	24
May	5	7	—	—	—	32
June	1	4	—	—	—	9
July	5	3	1	1	—	36
August	7	2	1	—	—	16
September	13	12	—	1	1	26
October	8	6	2	—	—	19
November	1	12	—	—	—	37
December	3	7	—	—	—	17
TOTALS	88	69	11	3	2	313

TABLE XIII

CASES OF ANAEMIA REPORTED FROM HOSPITALS AND DISPENSARIES

Year	*Population as at 30th June*	*Treated in hospital*		*% Anaemia to all causes*	*Treated at dispensaries and out-patients' depts of hospitals*			*Treated by Mobile Dispensaries*		
		For anaemia	*For all Causes*		*For Anaemia*	*For all causes*	*% Anaemia to all causes*	*For Anaemia*	*For all causes*	*% Anaemia to all causes*
1945	423,570	1,670	27,321	6·1	9,769	293,621	3·3	no mobile service		
1946	424,219	2,068	28,390	7·3	10,835	309,749	3·5	do.		
1947	432,422	1,517	28,042	5·4	10,558	300,158	3·5	included in previous colums		
1951	483,859	3,005	29,039	10·3	19,753	225,837	8·7	14,558	107,214	13·6
1952	501,469	2,936	29,447	9·9	18,405	224,312	8·2	17,204	137,035	12·6
1953	516,525	2,934	30,198	9·7	21,150	248,049	8·5	13,507	111,849	12·1
1954	530,461	2,634	26,669	9·8	25,573	267,443	9·5	16,696	118,912	14·0

TABLE XIV

FOOD IMPORTS OF MAURITIUS FOR 1952 AND 1953

Total Imports

	Year 1952 *Metric tons*	% *of prewar imports*	*Year 1953* *Metric tons*	% *of prewar imports*
Rice	41,721	69·5	58,562	97·6
Wheat flour	21,912	245·2	21,699	241·1
Pulse	4,352	73·4	5,134	86·6
Potatoes	2,894	203·8	2,749	193·6
Live cattle (head) ...	2,972	61·3	4,104	84·6
Fished salted or pickled ...	1,005	186·6	765	142
Fresh fruit	544	413·4	683	517·7
Frozen meat	535	—	470	—
Bacon, ham, smoked, dried or salted meats	121	—	61	—
Sausages of all kinds ...	9	—	18	—
Meat and meat preparations	69	—	73	—
Milk (condensed or powdered)	701	—	731	—
Butter	156	—	189	—
Cheese	87	—	68	—
Dairy products not otherwise specified ...	18	—	87	—
Fish frozen	178	—	64	—
Fish canned	678	—	697	—

TABLE XV

SUMMARY OF WORK PERFORMED BY THE MILK UNIT FROM 17TH DECEMBER 1953 TO 31ST DECEMBER, 1954

	Number of cases prosecuted					*Sentences*			
						Fines	*Imprisonment*		
Nature of offence	*Total*	*Fined*	*Dis-missed*	*Struck out*	*Pending cases*	*Rs.*	*Months*	*Weeks*	*Days*
1. Sale of sophisticated milk	471	440	3	4	24	49,513	99	12	—
2. Failing to have name and surname painted on the side of milk vessels	61	58	nil	nil	3	585	—	—	—
3. Failing to have the kind of milk painted on the side of milk vessels	60	58	nil	nil	2	1,845	—	—	—
4. Failing to produce on demand Registration Certificate as milksellers whilst selling milk	35	30	nil	nil	5	218	—	—	—
5. Failing to produce on demand Registration Certificate as cowkeepers whilst selling milk	7	7	nil	nil	nil	135	—	—	—
6. Carrying water in milk vessels	12	11	1	nil	nil	410	—	—	—
7. Hawking milk in vessels of capacity of more than 1 litre and less than 15 litres	16	14	1	nil	1	265	—	—	—
8. Refusing to sell a sample of milk for purposes of analysis	5	5	nil	nil	nil	485	—	—	15
9. Hawking of skimmed milk...	10	9	nil	nil	1	235	—	—	—
10. Selling of milk without a Medical Certificate from a Government Medical Officer	1	1	nil	nil	nil	5	—	—	—
11. Employing a person under 16 years of age in the trade of milk	3	2	1	nil	nil	40	—	—	—
TOTAL ...	681	635	6	4	36	53,736	99	12	15

TABLE XVI

MILK CONTRAVENTIONS

		Sentence			
		Imprisonment			
District or Section	*No. of successful prosecutions*	*Months*	*Weeks*	*Days*	*Fines*
					Rs
Port Louis District	105	13	—	—	12,738
Pamplemousses District	97	19	—	—	7,121
Rivière du Rempart District	48	2	—	—	2,995
Flacq (North Section)	52	—	—	—	2,902
(South Section)	32	3	6	—	2,875
Grand Port District	36	3	—	—	2,418
Savane District	26	—	—	—	2,585
Curepipe Section	12	—	6	—	485
Vacoas Section	56	1	2	14	3,685
Rose Hill Section	43	2	—	—	4,125
Black River District	2	—	—	—	20
Moka District	19	—	—	8	633
Special Milk Unit	635	99	12	15	53,736
TOTALS	1,163	142	26	37	96,318

TABLE XVII

SANITARY INSPECTORS' YEARLY REPORT—1954

District or Section	*Examination of foodstuffs*	*Simples of food-stuffs for analysis*	*Seizures*	*Inspection of food premises*	*Visits to slaughter houses*	*Visits to markets*	*Inspection of schools*	*Inspection of offensive trades*	*Inspection of other premises*	*Inspection on account of new buildings*	*Inspection in connection with mosquito control*	*Inspection in connection with notifiable diseases*	*Inspection in connection with night soil service*	*Inspection in connection with scavenging service*	*Disinfections carried out*	*No. of notices, orders and requests served*	*Cremations attended to*
Port Louis District ...	1,302	156	39	2,002	—	15	49	1	6,285	602	6,285	54	—	—	23	382	26
Pamplemousses District	1,068	123	4	374	—	..	141	62	12,879	1,094	13,456	38	278	639	8	905	71
Rivière du Rempart District	460	65	—	269	—	—	60	4	—	321	4,440	32	262	928	18	582	75
Flacq (North Section)	634	27	7	559	165	365	133	25	5,128	333	5,041	15	249	295	9	562	77
Flacq (South Section)	49	24	—	187	2	—	44	10	6,222	177	4,142	10	414	365	9	554	18
Grand Port District ...	191	54	21	861	202	156	230	7	112	287	597	37	176	894	9	896	62
Savane District ...	551	—	39	989	115	—	201	15	—	322	8,489	22	240	365	11	762	38
Curepipe Section ...	605	—	10	1,024	5	107	83	—	6,049	339	8,700	36	3,269	365	12	496	18
Vacoas Section ...	194	—	1	708	—	500	23	4	6,884	380	6,884	7	155	600	5	624	36
Rose Hill Section ...	1,654	52	30	1,065	—	186	109	7	6,108	747	1,717	44	241	365	34	593	81
Moka District ...	203	—	1	226	—	—	64	6	3,303	71	432	6	365	365	6	216	2
Black River District ...	365	37	27	602	—	365	45	2	4,046	124	4,046	20	365	365	10	571	47
TOTALS ...	7,276	539	179	8,866	489	1,694	1,182	143	57,006	4,797	64,229	321	6,014	5,546	154	7,143	551

TABLE XVIII

PROSECUTIONS ENTERED AT THE INSTANCE OF THE HEALTH DEPARTMENT, 1954—(WHOLE COLONY)

		No. of Cases				*Sentence*			
Nature of Offence	*Total*	*Successful Prosecutions*	*Discharged*	*Postponed*	*Summons withdrawn*	*Total Fines Rs.*	*Total Imprisonment*		
							Months	*Weeks*	*Days*
Selling sophisticated milk	375	355	3	17	—	40,181	43	14	22
Failing to have the names, surnames and the kind of milk painted on milk vessels (G.N. 80/1944) ...	79	78	—	1	—	1,137	—	—	—
Failing to produce on demand Registration Certificates whilst selling milk (G.N. 42/1934) ...	80	79	—	1	—	894	—	—	—
Non-compliance within delay of Notices re: nuisances as defined in Art: 18 of the Public Health Ordinance 1925	104	91	—	1	12	1,114	—	—	—
Preparing foodstuffs without taking adequate measures to prevent infection or contamination (P.H O. 47/1925)	33	33	—	—	—	420	—	—	—
Exposing for sale ready eatable foodstuffs unprotected from dust and flies (G.N. 320 of 1920)	112	104	—	6	2	1,351	—	—	—
Failing to provide latrines on premises or to maintain the latrines in good condition G.N. 183/1926)	92	91	—	1	—	650	—	—	—
Failing to produce on demand Medical Certificates—whilst selling food commodities (G.N. 153 of 1926 and 164 of 1927)	101	99	—	—	2	754	—	—	—
Burning charcoal without permit (G.N. 198/1907) ...	11	11	—	—	—	525	—	—	—
Other offences	73	73	—	—	—	1,608	3	—	—
TOTALS ...	1,060	1,014	3	27	16	48,634	46	14	22

TABLE XIX

SANITARY INSPECTORS' ANNUAL REPORT PORT–LOUIS DISTRICT FOR THE YEAR 1954

Examination of foodstuffs	1,302
Samples of foodstuffs for analysis	156
Number of seizures	39
Inspection of premises	2,002
Inspection of schools	49
Inspection of offensive trades	1
Inspection of other premises	6,285
Inspection on account of new buildings	602
Inspection in connection with mosquito control ...	6,285
Inspection in connection with notifiable diseases and contacts	54
Visits to slaughterhouses	4
Visits to markets	19
Number of notices served	382
Number of cremations attended to	26
No. of disinfections	23

Particulars of Inspection	*Number of visits*	*Notices served*
Visits to bakeries and pastries	54	—
Cowsheds and stables	71	4
Dairies	3	—
Factories and others	41	—
Markets	19	—
Slaughterhouses	4	—
Provision shops	471	—
Hotels and restaurants	157	—
Schools	49	—
Private premises	6,285	382
Cremation grounds	26	—

TABLE XX

PORT LOUIS DISTRICT

PARTICULARS OF CASES PROSECUTED AT THE INSTANCE OF THE HEALTH DEPARTMENT—YEAR 1954

Nature of offence	Number of cases					Sentence		Remarks
	Total	Fined	Discharged	Post-poned	Struck out	Total Fines Rs	Imprisonment	
Sale of sophisticated milk (M.T. Regs. Caps. 277 Sub. Legis)	94	73	1	15	—	12,405+costs	13 months hard labour	
Failed to produce Registration Certificate as milk-seller (M.T. Regs. Cap. 277 Subs. Legis)	5	5	—	—	—	93+costs	—	
Failed to have milk-cans properly marked (M.T. Regs. Cap. 277 Subs. Legis) ...	19	19	—	—	—	205+costs	—	
Hawking milk in undersized cans (M.T. Regs. Cap. 277 Subs. Legis)	3	3	—	—	—	35+costs	—	
Failed to produce Medical Certificate (G.N. 152 of 1926)	10	8	—	—	2	85+costs	—	2 cases struck out, party untraceable
Exposing cakes to dust and flies (Regs. 320 of 1920)	32	29	—	3	—	319+costs	—	
Preparing ice sweets without taking adequate measures to guard against contamination (Ord. 47 of 1925)	23	23	—	—	—	325+costs	—	
Failing to comply with notice (Ord. 47 of 1925)	7	7	—	—	—	103+costs	—	
Running ice factory without permit (G.N. 216 of 1926)	1	1	—	—	—	25+costs	—	
TOTAL ...	194	168	1	18	2	13,595+costs	13 months	

TABLE XXI

SUMMARY OF WORK IN PLAINES WILHEMS DURING THE YEAR 1954

Description of premises inspected	*No. of Visits*	*Inspection of premises Notices (under Ordinance 47 of 1925)*			*Orders (under Ordinance 28 of 1946)*			*Requests*		
		No. served	*No. complied with*	*No. not complied with*	*No. served*	*No. complied with*	*No. not complied with*	*No. served*	*No. complied with*	*No. not complied with*
1. Bakeries and Pastries ...	360	33	31	2	—	—	—	—	—	—
2. Cemeteries and cremation grounds	129	—	—	—	—	—	—	—	—	—
3. Dairies	48	1	1	—	—	—	—	—	—	—
4. Factories :—										
(*a*) Aerated water (*b*) Others	153	4	2	2	—	—	—	—	—	—
5. Hotels and restaurants ...	489	20	16	4	—	—	—	—	—	—
6. Markets	793	—	—	—	—	—	—	—	—	—
7. Private premises	20,346	1,050	965	85	1	1	—	11	9	2
8. Shops and stores	1,476	69	57	14	—	—	—	—	—	—
9. Schools	215	—	—	—	—	—	—	—	—	—
10. Slaughter houses	9	—	—	—	—	—	—	—	—	—
11. Stables and cowsheds ...	839	11	8	3	—	—	—	—	—	—
TOTALS ...	24,857	1,188	1,080	110	1	1	—	11	9	2

TABLE XXII

Particulars of Cases Prosecuted at the Instance of the Health Department—Plaines Wilhems District during the year 1954

Nature of offence	Number of cases			Sentences				Remarks
	Total	Fined	Dis-charged	Total Fines Rs	Imprisonment			
					Months	Weeks	Days	
Sale of sophisticated milk … … … … … …	84	83	1	7,883	3	8	14	
Failing to comply with Notices (Ord. 47 of 1925) … …	47	34	—	561	—	—	—	
Failing to produce Medical Certificate (G.N. 153 of 1926) …	14	14	—	84	—	—	—	
Failing to produce Registration Certificate as milk seller …	8	8	—	55	—	—	—	
Failing to have milk cans properly marked (G.N. 80 of 1944).	15	15	—	297	—	—	—	
Exposing cakes to dust and flies (G.N. 320 of 1920) … …	62	57	—	805	—	—	—	
Carrying water in milk can … … … … …	1	1	—	10	—	—	—	
Failing to provide and maintain latrines … … …	2	2	—	20	—	—	—	
Hawking milk in can of capacity of less than 1 litre and more than 15 litres … … … … … … …	1	1	—	10	—	—	—	
Hawking of skimmed milk … … … … …	3	3	—	40	—	—	—	
Other offences … … … … … … …	13	13	—	390	—	—	—	
Totals …	250	231	1	10,155	3	8	14	

TABLE XXIII

SHIPS ARRIVING IN PORT LOUIS DURING THE PERIOD 1ST JANUARY, TO 31ST DECEMBER, 1954

Month	*Number of incoming vessels*	*No. admitted to pratique on arrival*	*No. arriving from infected ports*	*No. of crew examined*	*No of passengers*		*No. of passengers under surveillance*	*No. of vessels admitted to pratiqve after disinfection of linen and effects of passengers and crew.*	*No. of vessels admitted to pratique after fumigation of cargo.*	*No. of vessels detained for purposes of disinfection on account of quarantinable diseases.*
					Landing	*Transit*				
January ...	25	14	11	1,876	166	485	—	7	10	—
February ...	22	18	4	1,747	622	297	—	10	10	—
March ...	29	21	8	2,034	198	412	—	12	15	—
April	18	15	3	1,321	185	377	—	2	8	—
May	25	23	2	1,843	332	339	—	7	8	—
June	24	22	2	1,778	712	329	—	6	9	—
July	28	27	1	1,636	143	671	—	10	14	—
August ...	32	30	2	2,059	385	725	—	15	14	—
September ...	32	29	3	1,876	242	264	—	15	12	—
October ...	23	21	2	1,637	771	264	—	11	8	—
November ...	40	34	6	2,364	201	327	—	18	12	—
December ...	40	37	3	2,496	1,430	551	—	22	13	—
TOTAL ...	338	291	47	22,667	5,387	5,041	—	135	133	—